

MARYLAND STATE HIGHWAY ADMINISTRATION
PROJECT PLANNING DIVISION
ENVIRONMENTAL EVALUATION SECTION

ARCHEOLOGICAL REPORT NUMBER 74

**PHASE IB INTENSIVE ARCHEOLOGICAL
SURVEY OF MARYLAND ROUTE 100
WETLAND MITIGATION SITES, BEEHIVE
AND SCHULTZ FARM PROPERTIES,
HOWARD COUNTY, MARYLAND**



Contract Number AW 890-201-070

1993

Copies of this report are deposited at the following Maryland and Washington, DC locations:

Caudill Memorial Library
Department of Anthropology
The American University
4400 Massachusetts Avenue, N.W.
Washington DC 20016

Office of Professional Services
Division of Cultural Resources
National Park Service
1100 Ohio Drive, S.W.
Washington DC 20242
Attn: Stephen Potter

Baltimore Center for Urban Archaeology
802 East Lombard Street
Baltimore, MD 21202
Attn: Louise Akerson

Archeology Division
St. Mary's City Commission
St. Mary's City, MD 20686

Department of Anthropology
Marist Hall, Room 8
Catholic University of America
Washington DC 20064

Department of Anthropology
Archaeology Laboratory
University of Maryland
College Park, MD 20742

Maryland Historical Trust
Division of Historical and
Cultural Programs
Department of Housing and
Community Development
100 Community Place
Crownsville, MD 21032-2023

ANNE ARUNDEL COUNTY
Dr. Al Luckenbach
Anne Arundel County
Office of Planning and Zoning
Heritage Office Center
2664 Riva Road
MS - 6303
Annapolis, MD 21404-2700

MARYLAND STATE HIGHWAY ADMINISTRATION
PROJECT PLANNING DIVISION
ENVIRONMENTAL EVALUATION SECTION

ARCHEOLOGICAL REPORT NUMBER 74

**PHASE IB INTENSIVE ARCHEOLOGICAL
SURVEY OF MARYLAND ROUTE 100
WETLAND MITIGATION SITES, BEEHIVE
AND SCHULTZ FARM PROPERTIES,
HOWARD COUNTY, MARYLAND**

by

Mary F. Barse

Contract Number AW 890-201-070

1993

**Phase IB Intensive Archeological Survey of Maryland Route 100
Wetland Mitigation Sites, Beehive and Schultz Farm Properties,
Howard County, Maryland**

by

**Mary F. Barse
Archeology Group
Environmental Evaluation Section
Project Planning Division
State Highway Administration**

ABSTRACT

A Phase IB archeological identification survey was performed at the Beehive and Schultz Farm Properties in Howard County, Maryland, where creation of wetlands to mitigate impacts from construction of Maryland Route 100 from Interstate 97 to Interstate 95 is proposed. State Highway Administration's Archeology Group performed fieldwork between July 28 and September 29, 1992. Prehistoric archeological sites 18HO203, 18HO204, 18HO206, and historic archeological site 18HO205, were identified. Prehistoric site 18HO204 represents a temporally undiagnostic, short-term campsite with a quarry and primary lithic reduction focus. Historic site 18HO205 is a 20th century structure ruin and associated archeological deposit reflecting occupation of the site from the early through middle 20th century. Site 18HO206 is interpreted as a short-term campsite with a quarry focus, dating to the Late Archaic prehistoric sub-period. Prehistoric site 18HO203 contains a series of overlapping campsites with Early Woodland representation and a historic component dating primarily to the 19th and 20th centuries. Sites 18HO203 and 18HO206 contain buried, prehistoric period deposits with integrity, and are considered potentially eligible to the National Register of Historic Places. Both sites will be impacted by proposed construction. Phase II evaluation is recommended if the sites cannot be avoided. Sites 18HO204, 18HO205, and the historic component of Site 18HO203, are not considered potentially significant and no additional investigation is recommended.

TABLE OF CONTENTS

Abstract	ii
List of Figures	iv
List of Tables	v
Introduction	1
Environmental Setting	4
Paleoenvironment	5
Cultural Background	6
Previous Investigations	9
Research Design	10
Methodology	15
Results of Fieldwork	16
Interpretations and Recommendations	44
References Cited	47
Appendix I Glossary	51
Appendix II Qualifications of Investigators	52
Appendix III Site Forms and Artifact Inventories	53
Appendix IV Shovel Test Pit Data	118
Appendix V Time and Cost Estimates for Additional Work	154

LIST OF FIGURES

Figure 1.	Map of Maryland Archeological Research Units showing project location.	2
Figure 2.	Portion of USGS (1974) 7.5' Relay topographic quadrangle showing identified archeological sites.	3
Figure 3.	Portion of Martenet's (1860) Map of Howard County showing historic structure locations. .	12
Figure 4.	Portion of Martenet's (1860) Map of Anne Arundel County showing historic structure locations. .	13
Figure 5.	Portion of Hopkins' (1878) Atlas of Fifteen Miles around Baltimore including Howard County, Maryland showing historic structure locations.	14
Figure 6.	Map showing the Beehive Property project area limits, locations of shovel test pits, and site boundaries for Site 18HO205 and Site 18HO206.	17
Figure 7.	Representative soil profile illustrations from Site 18HO206.	18
Figure 8.	Distribution of artifacts in the plowzone at Site 18HO206.	20
Figure 9.	Distribution of artifacts in the A2/E and B1/B2 horizons at Site 18HO206.	21
Figure 10.	Distribution of artifacts in the Ab horizon at Site 18HO206.	22
Figure 11.	Distribution of artifacts below the Ab horizon on the floodplain, and in the B/C horizons on the lower terrace at Site 18HO206.	24
Figure 12.	Map showing the Schultz Farm Property project area limits, locations of shovel test pits, and site boundaries for Site 18HO203 and Site 18HO204.	28
Figure 13.	Representative soil profile illustrations from Site 18HO203.	30
Figure 14.	Distribution of prehistoric artifacts in the plowzone at Site 18HO203.	32
Figure 15.	Map of Site 18HO203 showing horizontally discrete concentrations of prehistoric artifacts recovered below the plowzone. . . .	37

LIST OF TABLES

Table 1.	Distribution of artifacts by stratigraphic horizon and excavation level at Site 18H0206.	25
Table 2.	Distribution of artifacts by stratigraphic horizon and excavation level at Site 18H0203.	33

**Phase IB Intensive Archeological Survey of Maryland Route 100
Wetland Mitigation Sites, Beehive and Schultz Farm Properties,
Howard County, Maryland**

by

Mary F. Barse
Environmental Evaluation Section
Project Planning Division
State Highway Administration

INTRODUCTION

The Maryland State Highway Administration's Archeology group performed Phase IB archeological investigations at two locations proposed for the creation of wetlands to mitigate impacts associated with MD Route 100 from Interstate 97 to Interstate 95 (Figure 1 and Figure 2). The Beehive Property contains approximately 12 acres located in Howard County, near the community of Harwood Park. The project proposes to create 4.3 acres of densely vegetated emergent wetlands on the floodplain of an unnamed tributary of Shallow Run. The Schultz Farm Property contains approximately 18 acres located near the confluence of Shallow Run and Deep Run, in Howard County, Maryland. Approximately 4.5 acres of emergent wetlands will be created on the floodplain of the Schultz Farm Property, north and south of Shallow Run. Project plans propose subsurface grading in the actual mitigation sites, with secondary impacts associated with construction access and on-site soil wasting. Because final design plans were not available at the time of the archeological investigation, all of the acreage contained in tax parcels at each site was subjected to systematic surface survey and sub-surface testing.

The purpose of the Phase IB archeological survey was to identify and evaluate the potential significance of archeological sites within the proposed project areas. Archeological studies for this project are required under the 1985 Maryland Historical Trust Act (Annotated Code of Maryland, Article 83B, Sections 5-601 through 5-621), as amended (1988 and 1990), Section 106 of the National Historic Preservation Act of 1966 as amended, and the Department of Transportation Act of 1966. All work was performed in accordance with Guidelines for Archeological Investigations in Maryland (McNamara 1981), and Archeology and Historic Preservation: Secretary of the Interior's Standards and Guidelines.

The fieldwork took place between July 28 and August 10, 1992, and from September 17 through 29, 1992. Principal Investigator for the project was Dr. Ira C. Beckerman. Mary F. Barse acted as supervisory archeologist. Spencer O. Geasey, Daniel Johnson, Robin Meyer, Jason Moser, and Andrew Watts provided assistance with the fieldwork. All artifacts and records associated with the project will be permanently curated by the Maryland Historical Trust.

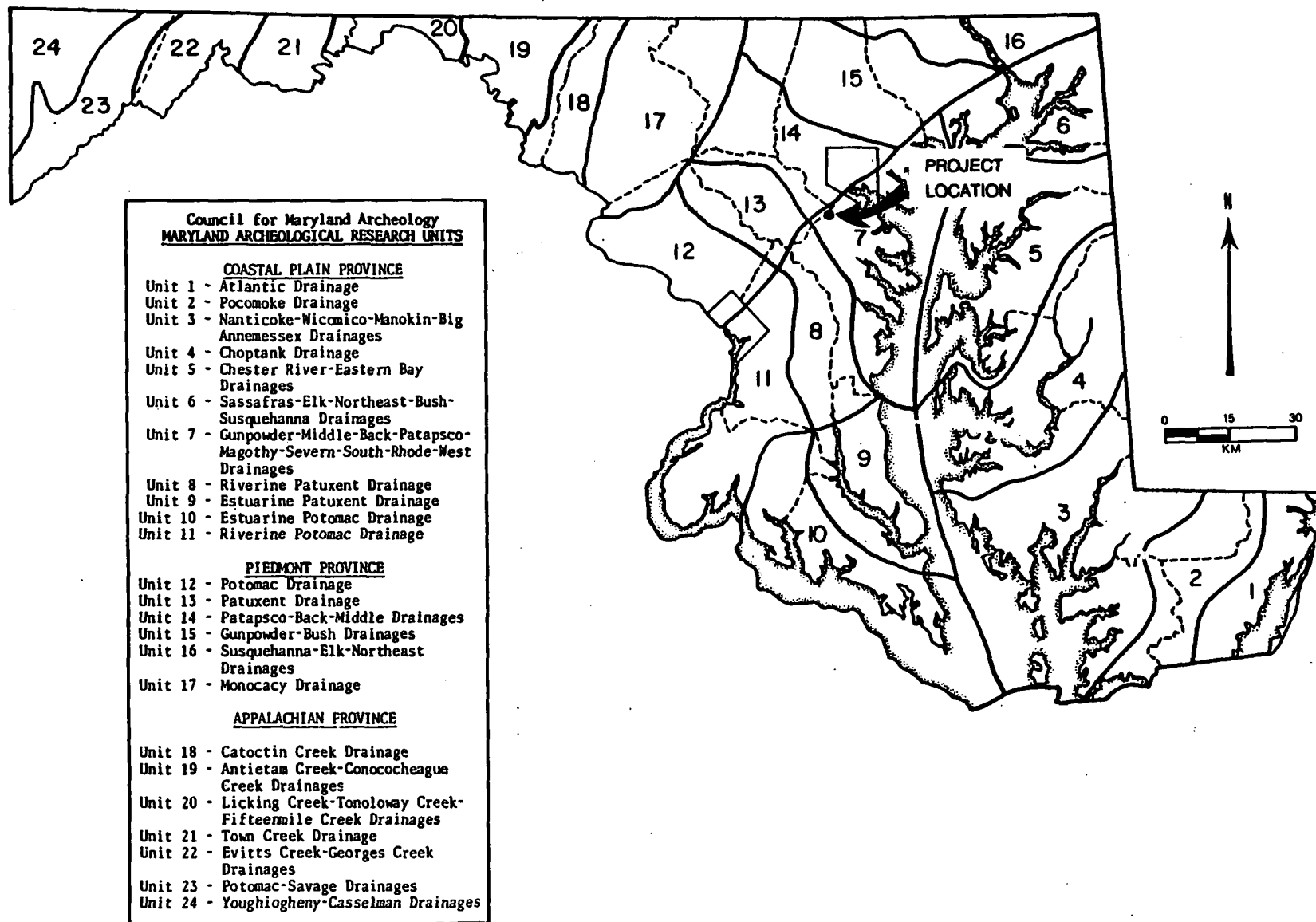


Figure 1. Map of Maryland Archeological Research Units showing project location.

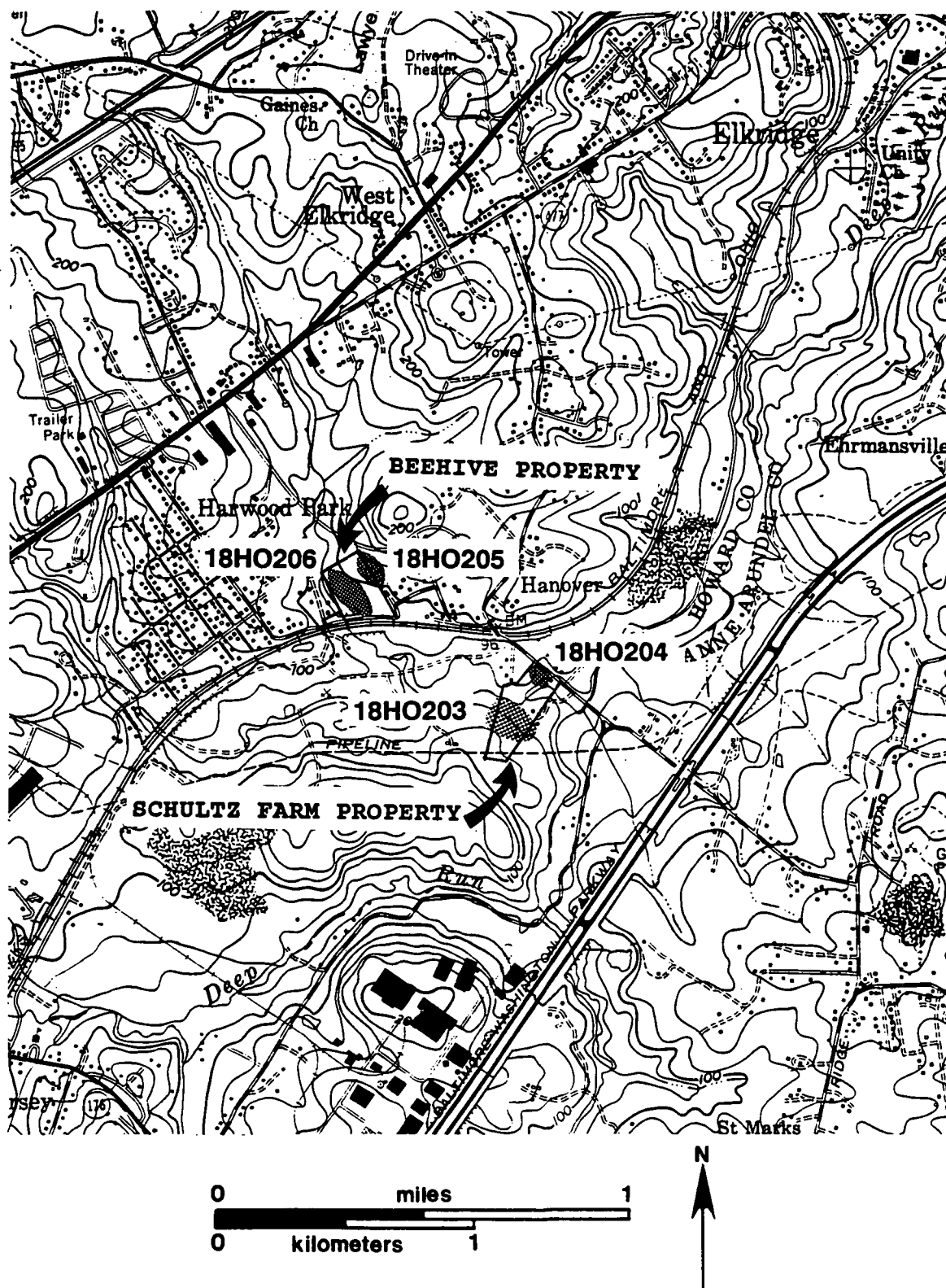


Figure 2. Portion of USGS (1974) 7.5' Relay topographic quadrangle showing identified archeological sites.

ENVIRONMENTAL SETTING

Both wetland mitigation sites are located within the Western Shore division of the Coastal Plain physiographic province, in Council for Maryland Archeology Research Unit 7 (Gunpowder - Middle - Back - Patapsco - Magothy - Severn - South - Rhode - West Drainages) (Figure 1). The regional geology is characterized by unconsolidated sands, clay, and gravel, superimposed upon crystalline basement rock. Both project areas are situated near the Piedmont/Coastal Plain interface which has influenced the amount of alluvial soil deposition and quantity of secondarily deposited cobbles present in their locations. Reduction of stream gradient and velocity below the Fall Line has exaggerated the deposition of stream bed loads, increasing the likelihood for deeply buried archeological sites and providing dense deposits of cobbles available for use as raw lithic materials for prehistoric occupants.

The Patapsco River and its tributary Deep Run form the principal drainage in the near vicinity of both project areas. The Beehive Property is situated immediately adjacent to an unnamed second-order tributary of Shallow Run, a tributary of Deep Run. The property contains a floodplain on the east side of the active stream, a low, narrow terrace, and steep slopes ascending eastward to a series of higher terraces. Elevation ranges from 80 feet (24 m) to 120 feet (37 m) above mean sea level.

The floodplain and lower terrace of the Beehive Property were overgrown with thick scrub. Disturbance appeared confined to past agricultural activities and an old farm road running north/south along the inner margin of the lower terrace. Intervening slopes between the lower and upper terrace were moderately to severely eroded and wooded with second-growth pines and some deciduous vegetation. The upper terrace was cleared and contained the ruins of a 20th century farmstead. Several outbuildings were present including a large cinder-block structure that housed a boat building business. The entire upper terrace was severely eroded, with gravel and cobble deposits exposed at the ground surface.

Surface soils on the floodplain and lower terrace portions of the Beehive Property consist of poorly-drained Hatboro silt loam (Ha), and Woodstown sandy loam (WoB2) with 0 - 5 percent slopes. Hatboro soils have high water tables and are flooded at irregular intervals. They are derived from alluvial sediments washing from the adjacent Piedmont uplands, and are common along stream margins in the Coastal Plain uplands. The Woodstown series is characterized by deep, well-drained soils formed in very old sandy materials containing moderate amounts of silt and clay. The slopes and upper terrace contain Sandy and Clayey Land (ScB, ScD) that consists of a sandy surface mantle overlying very plastic clay. In some places, these soils contain large amounts of fine to medium gravel. Danger of erosion and instability of the underlying clay

make the Sandy and Clayey Land series marginally suitable for agriculture.

The Schultz Farm Property is situated north and south of third-order Shallow Run, approximately 1,500 feet (457 m) west of its confluence with Deep Run. It contains floodplains adjacent to Shallow Run, and gently sloping terraces, and steep upland footslopes. Elevation ranges from 40 feet (12 m) to 100 feet (31 m) above mean sea level. The property was cleared and cultivated in the historic past and is currently in use as an operating horse farm planted in thick grass pasture. Areas within the property have been disturbed by the construction of outbuildings and residential structures. An area along Hanover Road at the northern project boundary has been disturbed by the construction of an access road leading to a former brick making plant that is currently used as a trash disposal facility. Portions of the floodplain on the north bank of Shallow Run have been disturbed by construction of a Howard County sewer pipeline. Portions of the floodplain and terrace at the western project area limits, south of Shallow Run, have been disturbed by sand and gravel mining.

Surface soils south of Shallow Run consist of level, well-drained Comus silt loam (Cs) on the floodplain, and moderately well-drained Beltsville silt loam (BeB2, BeC3) with 1 - 10 percent slopes on the terraces. The terrace soils have been moderately to severely eroded. Footslope areas near the southern project boundary contain well-drained Chillum gravelly loam (ClC3) with 5 - 10 percent slopes. Chillum soils formed in silty or sandy eolian deposits over very old sandy and gravelly alluvium (Matthews and Hershberger 1968). The majority of the property north of Shallow Run occupies a level floodplain setting containing Comus silt loam (Cs). A small elevated area in the northwest portion of the project area contains moderately well-drained Iuka loam (IuB) composed of local alluvium, with 1 - 5 percent slope. Shovel test pit excavations revealed the presence of a narrow strip of land north of Shallow Run containing soils characteristic of the Sandy and Clayey Land series that consists of a sandy surface mantle overlying very plastic clay.

PALEOENVIRONMENT

During late glacial times, from approximately 16,000 to 10,500 years ago, climate was controlled by the large Laurentide ice sheet covering most of North America. Extensive frontal activity at the edge of the glacier created a moist, cloudy condition with average temperatures approximately 5 degrees cooler than present (Carbone 1976). Fossil pollen data (Custer 1984) indicate that a relatively open, mixed coniferous forest of spruce and pines dominated the region. At the end of the Late Glacial episode (ca. 10,500 B.P.), melting and recession of the ice sheet resulted in changes in air circulation patterns, accompanied by vegetational changes and rise in sea level. Based upon data from Delaware Bay, sea level rose

1.0 m per century between 12,000 and 8000 years ago, slowing to 0.3 m per century between 8000 and 4000 years before present (Kraft 1971).

From 10,500 to 8500 years B.P. a beech-hemlock-birch forest association was present with an admixture of oaks in the Middle Atlantic. Many Pleistocene fauna became extinct, with caribou the only remaining herd animal (Gardner 1980). Deer and elk occupied forests characterized by rapidly fluctuating edge areas. Fossil pollen assemblages indicate a period of warmer temperatures and increased precipitation after 9000 B.P. As sea level continued to rise, interior swamps were created. Hickory and oak increased in number until approximately 6000 B.P. when forest compositions became dominated by these temperate hardwood elements.

After 6000 B.P. forest climax consisted of oak-hickory-pine and oak-chestnut associations. Forest closure and consequent reduced edge areas resulted in a decreased deer population, although wild turkey, acorns, hickory nuts, and chestnuts were present in abundance. The slowed rise of sea level created stable estuarine zones for shellfish and other brackish water faunal and floral species. Anadromous fish were distributed in considerable numbers in the Coastal Plain and eastern Piedmont. In the interior rivers, the fluvial environment became optimum for freshwater mussels and schooling fish.

After 3000 years B.P. essentially modern environmental conditions existed. Slight fluctuations in temperature and precipitation punctuated the otherwise stable temperate climate, with little if any change in flora and fauna from pre-settlement assemblages.

CULTURAL BACKGROUND

The Paleoindian period (9500 - 8000 B.C.) is the earliest widely recognized period of human occupation in the archeology of Maryland and the eastern United States. A semi-nomadic existence within a defined territory characterizes the settlement pattern, with emphasis placed on hunting (Gardner 1974). The large Pleistocene megafauna such as mammoth and mastodon were extinct by this time, resulting in a hunting focus oriented toward deer, elk, and perhaps caribou (Gardner 1980). Base camps were tied to quarry locations where jasper and other cryptocrystalline stone were mined for tool manufacture. Smaller exploitative camps radiated out in varying distances from the base camps. The Higgins Site (18AN478), located in Anne Arundel County less than 2 miles east of the project area, is the first intact occupation of this time period documented in Maryland (Ebright 1989). Other sites of this time period in the Maryland Coastal Plain are represented by isolated finds. However, none has been identified in Howard County.

Warmer and drier climatic conditions beginning in the early Holocene period, resulted in a more varied food resource base for subsequent Archaic period (8000 to 1000 B.C.) populations. A seasonally oriented, though still semi-nomadic, settlement pattern characterizes the period. The Early Archaic sub-period (8000 - 6000 B.C.) is viewed as a continuation of the earlier Paleoindian period adaptation, with emphasis placed on hunting and cryptocrystalline raw material for tool kits (Gardner 1974). By the end of the Early Archaic, less emphasis is placed on cryptocrystalline stone suggesting that quarry-based settlement became less important.

The Middle Archaic sub-period, (6000 - 3000 B.C.) is characterized by a greater variety of projectile point styles and the near abandonment of cryptocrystalline raw material for the tool kit. Increased adaptation to a wider variety of food resources is indicated archeologically by the addition of plant processing tools. Seasonally occupied base camps are found predominantly on floodplains of major drainages. Transitory hunting and exploitative camps are located in the uplands of the piedmont, along low-order drainages and near lithic sources, and adjacent to interior bogs and swamps and swampy floodplains of low-order drainages in the Coastal Plain.

The Late Archaic sub-period (3000 - 1000 B.C.) is recognized as a time of transition from a semi-nomadic to more sedentary condition. Increasing population and the utilization of abundant estuarine and riverine food resources may have generated a need for food storage capabilities reflected by the appearance of steatite bowls. Creation of estuaries by the continued rise in sea level resulted in the increased distribution of oysters and crabs in the Coastal Plain, and extensive seasonal runs of anadromous fish. The majority of projectile points representative of this period are side-notched and stemmed in form, and made predominantly of quartz. A generalized broadspear tradition appears at the terminal stage of the Late Archaic sub-period.

The subsequent Woodland period is divided into three sub-periods; Early Woodland (1000 - 300 B.C.), Middle Woodland (300 B.C. - A.D. 800), and Late Woodland (A.D. 800 - A.D. 1600). The Early Woodland sub-period is characterized by the appearance of ceramic container technology, hunting and gathering with increased reliance on riverine food resources, and settlement focused along higher order stream junctions. Smaller Early Woodland sites reflecting specialized exploitative forays, are found in the interior drainage areas of the Coastal Plain (Gardner 1976a, 1976b, 1982, 1987).

Little is known regarding Middle Woodland settlement patterns near the Coastal Plain/Piedmont transition. Numerous small sites are recorded near the Middle Patuxent River in the vicinity of

Columbia, and along the Rocky Gorge Reservoir near Scaggsville. These sites contain side-notched and lanceolate forms of the distinctive Selby Bay projectile point, and rhyolite debitage. Though a variety of topographic settings contain sites, an overwhelming majority are situated near springheads and at the mouths of spring ravines.

During the Late Woodland sub-period, sedentism and subsistence based upon agriculture was solidly established. Large, full-time base camps were located on the floodplains of major rivers. Stockaded villages began to appear after A.D. 1350, attesting to the extensive warfare between established ethnic groups throughout much of the Eastern Woodlands.

During the Contact and Settlement period and subsequent period of Rural Agrarian Intensification (A.D. 1570 to 1815), the process of contact and eventual conquest led to the near decimation of the native populations by European colonists through the spread of disease and competition for resources. Early settlement of the project area vicinity began at Elkridge in the late 17th century, and spread up the Patapsco to what is now Ellicott City. Scattered settlements were located along the edge of the Piedmont by 1730 (Wesler et al. 1981). Elkridge was declared a town in 1735. Its location at the head of navigation on the Patapsco allowed it to function as a shipping hub until siltation prevented passage of all but small vessels by 1776 (Wesler et. 1981). By the middle of the 18th century, an agricultural, tobacco-based economy was firmly established. All of the arable land located near water transportation routes was in use, and encouraged migration into the frontier west of the Fall Line. The westward Piedmont region was rapidly settled during the second half of the 18th century.

Rapid changes in labor and agricultural practices took place during the mid to late-18th century. Labor sources changed from free and indentured whites, to African, and later, native-born slaves. Howard County planters continued to produce tobacco as a major cash crop until soil depletion forced agricultural diversification. Grain agriculture and milling became important by the end of the 18th century in the region west of the Fall Line in response to the abundant water power at the Piedmont/Coastal Plain transition. Ellicott Mills ascended to dominance as Howard County's economic hub. Roads were constructed to facilitate moving grain to the mills and encouraged further development of the County's interior. Numerous communities grew up along the roads and provided support services to travelers. By the 1830s branches of the Baltimore and Ohio Railroad ran south to Washington, D.C. from Elkridge Landing and east to Baltimore from Ellicott City. Population declined in the 1820s as the shift from tobacco to grain agriculture encouraged outmigration to the western frontier (Wesler et al. 1981).

Lumbering, mining, and iron manufacturing exploited the abundant natural resources of the Piedmont uplands and further stimulated the development of interior transportation systems and consequent population expansion. Settlement pushed as far as western Maryland by the mid-18th century when German immigrants from Pennsylvania settled within the Monocacy River and Catoctin Creek drainages. Eastward out-migration of these groups contributed heavily to the growth and ascendancy of Baltimore as a major port city and industrial hub in the subsequent 19th century.

The Agricultural-Industrial Transition period (A.D. 1815 to 1870) and period of Industrial Urban Dominance (A.D. 1870 -1930) are characterized by the rapid growth of industry and manufacturing centered primarily within the Baltimore area during the early part of the 19th century, and later expanding throughout most of the state at its close. Developing urban areas were attractive to once rural agriculturalists following the general collapse of the tobacco market after the abolition of slavery and subsequent labor shortages resulting from the Civil War. Later in the century, competition with mid-western agricultural centers, which produced grain on a much larger scale, and improvements in rail transportation networks, further eclipsed agricultural production. National policy favored the industrial regions with high tariffs designed to raise the price of manufactured goods without a corresponding protection for agriculture. Many farms and small communities were abandoned for the economic opportunity the industrial urban areas offered. By the mid-20th century, substantial portions of eastern Howard County became the focus for residential subdivision, industrial, and commercial development.

PREVIOUS INVESTIGATIONS

Numerous archeological surveys have been conducted within the immediate region. The vast majority were carried out as compliance studies related to large transportation corridor or pipeline projects (Ballweber 1987, 1988, 1989; Conrad 1976; Curry 1977a, 1977b, 1977c, 1978, 1985; Frye 1986; Garrow et al. 1980; Kavanagh 1981; Kinsey 1978; and others). No archeological sites have been previously recorded within the Schultz Farm or Beehive Properties, though many are recorded along Deep Run and its tributaries. Most of the recorded sites are poorly documented or have been destroyed by mining or industrial and commercial development.

The project area vicinity was the subject of some of the earliest regional studies by Richard Stearns (1949), and later by Wayne Clark. Clark surveyed an area designated in the Maryland Archeological Site Survey files (MASS) as Relay quadrangle file reference #40 on the Schultz Farm Property in 1968. Clark surveyed an area west of Schultz Farm designated in the MASS files as Relay quadrangle file reference #41 in 1969. The location of Relay quadrangle file reference #41 overlaps the location of Richard Stearns' Site #6 (Stearns 1949) that is now designated 18H07.

Information supplied in the MASS files for the Relay quadrangle indicate that both of Clark's survey areas did not produce evidence of historic or prehistoric occupation or use.

Of the group of prehistoric sites identified by Stearns in the vicinity of Hanover, Maryland, only 18HO7 (Stearns' Site #6) is located on Shallow Run. The remaining sites, 18HO31 (Site #3), 18HO32 (Site #4), 18HO33 (Site #5), and 18AN264 (Site #7) are situated on Deep Run, north and east of the project areas. Most have been destroyed. However, Stearns (1949) reported the presence of grooved axes, celts, bannerstone and gorget fragments, steatite fragments, ceramic sherds, and numerous projectile points that may date from the Early Archaic to Late Woodland time periods at the sites (ibid: Plates 3 - 5).

RESEARCH DESIGN

Distribution of identified prehistoric archeological sites in the region surrounding the project area demonstrates strong preference for level settings adjacent to perennial water sources. Sites are clustered along Deep Run and its numerous first and second order tributaries. The headwaters region of Deep Run is situated in the eastern Piedmont of Howard County, and contains sites located predominantly upon terraces and hilltops adjacent to the low order feeder streams. Sites in this region tend to be small lithic scatters without tools or temporally diagnostic artifacts, and may represent short-term hunting camps.

Sites along the main stem of Deep Run are primarily focused on quarry and lithic reduction activities. Diagnostic artifacts of the Late Archaic prehistoric sub-period dominate assemblages that contain temporally sensitive artifacts. However, most of the sites are reported to contain few diagnostics and large quantities of primary flaking debris. Closer to the Fall Line, sites remain focused on quarry and primary lithic reduction activities, but assemblages show greater diversity in the functional and temporal attributes of the artifacts. This diversity may be indicative of a wider variety of subsistence activities as a response to ecological variables produced by the overlap of ecotones.

Similar patterns of settlement and subsistence are apparent in the southern portions of Montgomery County. The number of recorded sites increases dramatically as the Potomac River is approached, where the quantity of secondarily deposited lithic material in the form of river cobbles increases. Variety in site types increases as a response to maximized resource potential. The same pattern is seen in site distribution along the lower Patapsco River with large, multi-component settlements situated near the fresh/brackish transition zone near the historic head of navigation at Elkridge.

Previous archeological studies within the project area vicinity have demonstrated prehistoric settlement preference for

well-drained, elevated settings adjacent to water sources, especially at the confluences of tributaries. Use of narrow, poorly-drained floodplains or slopes is rare. Given the regional setting in a zone of overlapping ecotones, and micro-settings directly adjacent to tributaries of Deep Run, the Beehive and Schultz Farm properties were considered to have high prehistoric archeological potential. All areas in each property that were not previously disturbed or located on slopes greater than five percent were subject to survey.

Review of available historic maps (Griffith 1795; Martenet 1860a, 1860b, 1865, 1885; Hopkins 1878; USGS 1931, 1974) indicates the presence of roads, structures, or river crossings in the vicinity of the project areas as early as 1795. Griffith's (1795) map shows the approximate location of the Washington Turnpike (US 1) north of the Beehive and Schultz Farm properties, but shows no structures within the near vicinity of either project area.

Later historic maps (Martenet 1860a, 1860b, 1865, 1885; Hopkins 1878; USGS 1931) show numerous structures near the Beehive Property project area as early as 1860. The historic settlement of Hanover and the Hanover Switch of the Baltimore and Ohio Railroad are located at the eastern edge of the property. However, no structures are present in the project area on these maps prior to 1957 (USGS 1974), when the extant standing structures at the eastern edge of the project area appear.

Historic maps (Martenet 1860a, 1860b, 1865, 1885; Hopkins 1878; USGS 1931) show one structure near the confluence of Deep Run and Shallow Run near the eastern boundary of the Schultz Farm project area. Two other structures are shown in the vicinity of the project area, but do not appear to be within the property boundaries. Structure 1 (Figure 3) shown near the project area's eastern boundary is first depicted on Martenet's (1860a) Map of Howard County, Maryland, attributed to The Great Falls Manufacturing Company. However, Martenet's (1860b) (Figure 4) Map of Anne Arundel County, Maryland, shows the structure in the same approximate location attributed as "Old Paper Mill". Martenet's Map of Maryland (1865, 1885) shows the structure as "Old Paper Mill" with no reference to the Great Falls Manufacturing Company. The Later Hopkins' (1878) Atlas of Fifteen Miles around Baltimore including Howard County, Maryland, attributes Structure 1 to The Great Falls Manufacturing Company (Figure 5).

It is likely that The Great Falls Manufacturing Company owned the property and structure, but it is not known if a paper mill was actually operating since it is referred to from 1860 to 1885 as Old Paper Mill. Hopkins' (1878) map shows iron ore deposits north of the Schultz Farm project area. Perhaps the Great Falls Manufacturing Company was related to the Great Falls Iron Company operating at Elkridge Furnace, and purchased the property for ore mining. Furnace owners often sought to control their fuel supply

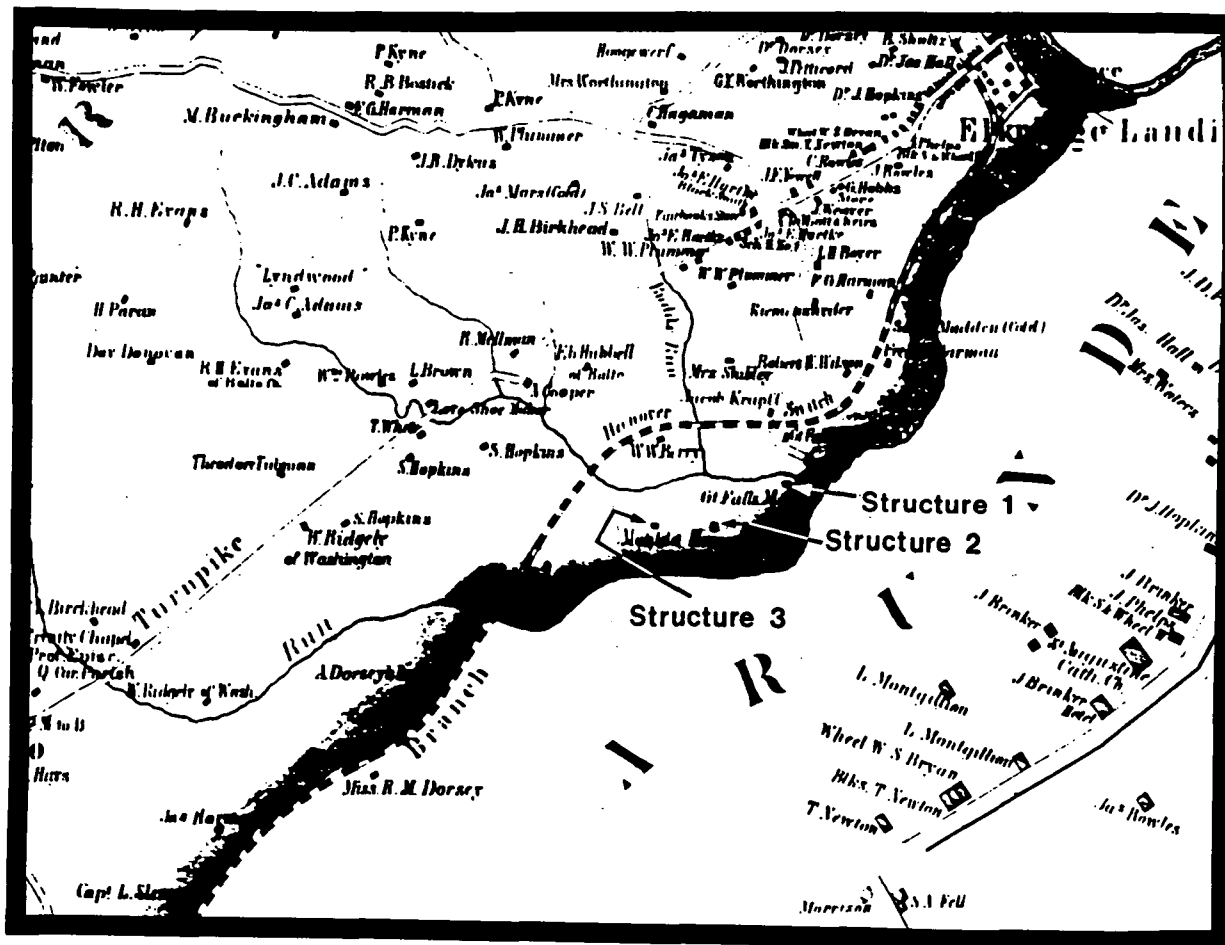


Figure 3. Portion of Martenet's (1860) Map of Howard County showing historic structure locations.

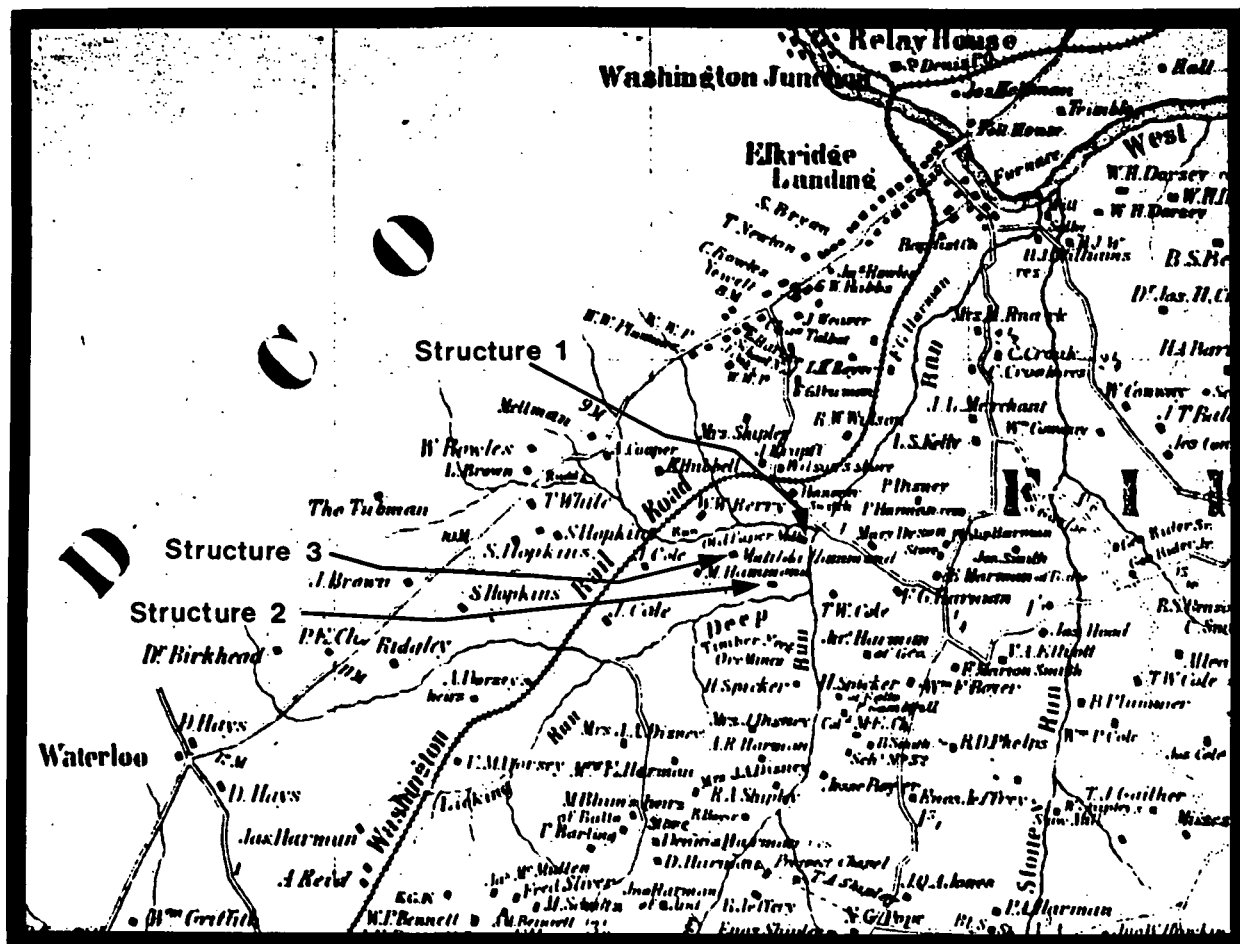


Figure 4. Portion of Martenet's (1860) Map of Anne Arundel County showing historic structure locations.

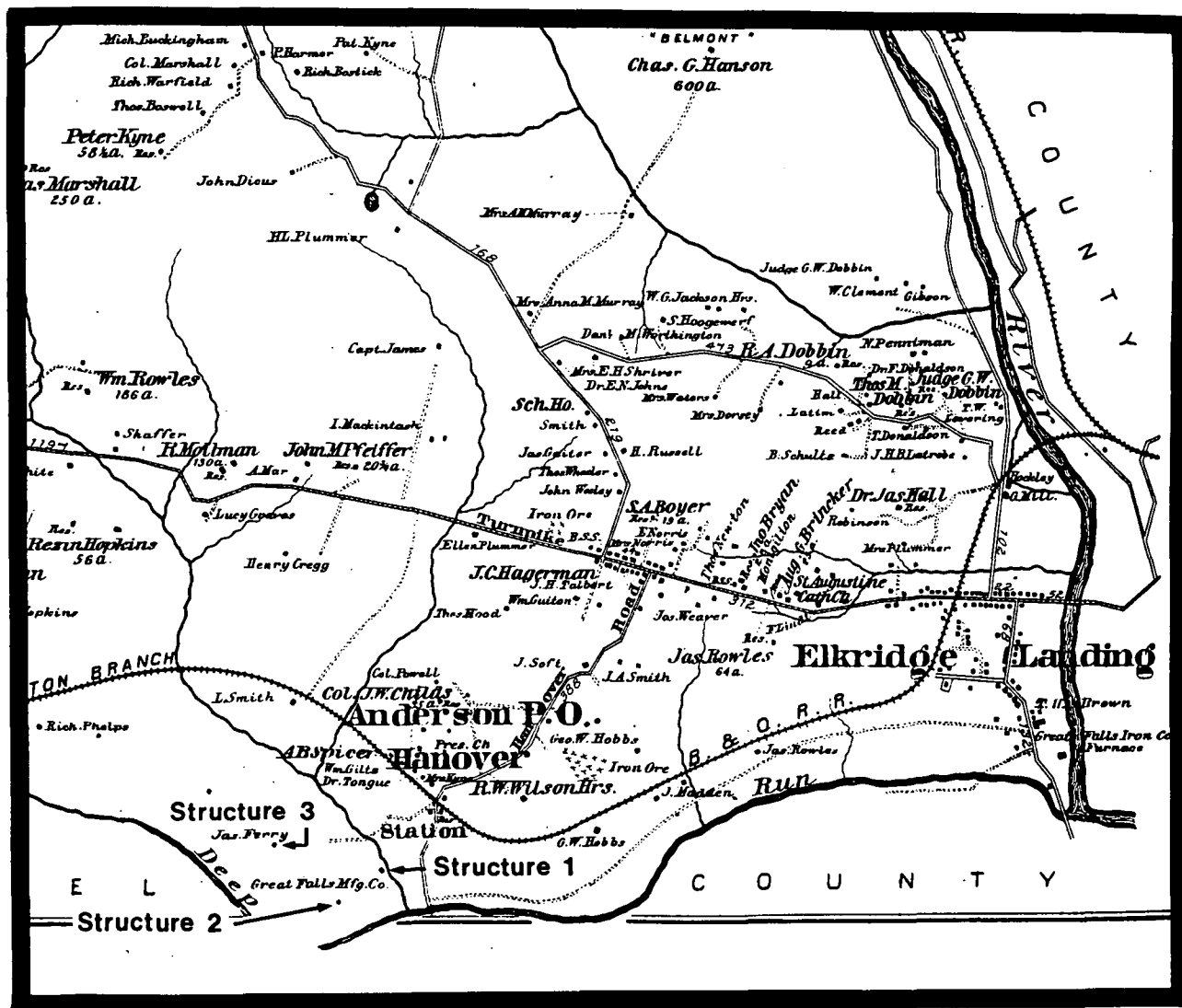


Figure 5. Portion of Hopkins' (1878) Atlas of Fifteen Miles around Baltimore including Howard County, Maryland showing historic structure locations.

by buying or leasing woodlands and by using ores locally supplied from owned or leased mines (Davies 1972). Structure 1 appears on the 1931 reprint of the USGS (1907) 15 minute Relay topographic quadrangle in the same location occupied by a modern brick house. Mr. William Schultz, the property owner, reported that he had an old structure and bank barn torn down to build his residence in that location. It is likely that the destroyed structure was Structure 1. The location of the bank barn is now occupied by a frame residence built sometime between 1931 and 1957.

Structure 2 (Figures 3 - 5) appears on historic maps south of the Schultz Farm project area, outside of the property boundaries. It is shown on Martenet's (1860a, 1860b) maps, but its ownership is ambiguous. It appears to be associated with "Hammond" (Martenet 1860a) and "M. Hammond" (Martenet 1860b), with no clear attribution in 1878 (Hopkins 1878) unless it was purchased by the Great Falls Manufacturing Company. Structure 2 is shown in 1931 (USGS 1907) outside of the project area.

Structure 3 (Figures 3 - 5) is shown south and west of the project area by 1860. It is attributed by Martenet (1860a, 1860b) to "Matilda", and in 1878 (Hopkins 1878) to "Jas. Ferry". It is shown outside of the property's western boundary in 1931 (USGS 1907).

METHODOLOGY

Areas with high potential for archeological resources within the Beehive Property consist of the floodplain, and terraces. Slopes in the intervening areas between the terraces were not considered to have likely archeological potential due to their steepness and moderate to severe degree of erosion. Disturbed areas were considered to have no archeological potential and were not tested. High potential areas within the Schultz Farm Property consist of the floodplain and gently sloping terraces on both sides of Shallow Run. Footslope areas at the northern project area boundary, the location of a sewer pipeline on the northern bank of Shallow Run, graded and landscaped areas north of the residential structure, and the trash facility access road at the western project boundary south of Hanover Road, were considered to have low archeological potential by virtue of their steepness or prior disturbance, and were not tested.

Both project areas were subjected to walk-over reconnaissance to ascertain disturbance or the presence or absence of surface anomalies. All high potential areas were investigated using 50 cm diameter shovel test pits aligned on a grid at 10 or 20 m intervals. All shovel test pits were excavated by natural stratigraphic layers or 10 cm arbitrary levels within stratigraphic layers. All excavated soil was screened through 1/4 inch hardware cloth with cultural material collected and bagged by levels within strata.

RESULTS OF FIELDWORK

Beehive Property

The Beehive Site (18HO206) (Figure 2 and Figure 6) was identified on the floodplain and low terrace adjacent to the unnamed tributary of Shallow Run during shovel testing. It occupies approximately 4.6 acres (1.9 Ha) as defined by the presence of 455 prehistoric artifacts recovered from 39 of 58 shovel test pits (Appendix III). Twenty of the shovel test pits contained 181 artifacts (or 40 percent of the total assemblage) in undisturbed context below the plowzone. The vast majority of artifacts consist of quartz debitage (259 decortication flakes, 155 non-cortex flakes, 11 shatter fragments, 1 chunk). Eight quartz cores, one quartz biface, a straight-stemmed, quartz projectile point fragment, three quartzite hammerstones, five pieces of fire-cracked rock, six quartzite flakes and five rhyolite flakes were also recovered. Preliminary analysis of the artifacts indicate a quarry/workshop focus at the site as suggested by the high ratio of decortication flakes to non-decortication flakes, and low percentage of tools in the overall assemblage. Evidence of bipolar and bifacial reduction is present within the assemblage, though attributes were not systematically recorded during the laboratory analysis.

Two basic soil profiles were evident at the site (Appendix IV) (Figure 7); each is characteristic of its respective topographic setting. Profiles from the floodplain portion of the site are characterized by deep alluvial sediments resting upon old stream channel or point bar deposits left from the westward migration of the adjacent unnamed tributary. Profiles from the slightly elevated terrace contain older, weathered deposits that appear to be residual in some places, or derived from more recent alluvium.

Floodplain profiles contain an upper A1 horizon characterized predominantly of 10YR 4/4 fine sandy loam. In some cases, the A1 horizon is a distinct layer, in others it is a more weathered upper portion of an Ap horizon. Some shovel test pits along the margin of the stream contained a thin layer of recently deposited clay or silty clay at the surface, that ranged in color from 10YR 4/4 - 4/6 or 10YR 5/8. This clay layer is derived from materials settling out of suspension from floodwater trapped on the floodplain. A plowzone (Ap) follows, generally to a depth of approximately 32 cm below surface, and is characterized by 10YR 3/4 - 4/3 silt loam or 10YR 4/4 fine sandy loam. Shovel Test Pits 3, 5, 7, 34, and 40, exhibit a series of buried plowzones ranging in depth from 20 cm to 56 cm below surface, demonstrating numerous episodes of flooding and deposition during the historic past. Unplowed C horizons follow to depths that range from 40 cm to 100 cm below surface. With the exception of Shovel Test Pits 1, 21, and 51 located closest to the unnamed tributary, all of the shovel test pits located on the floodplain portion of the project area contained a

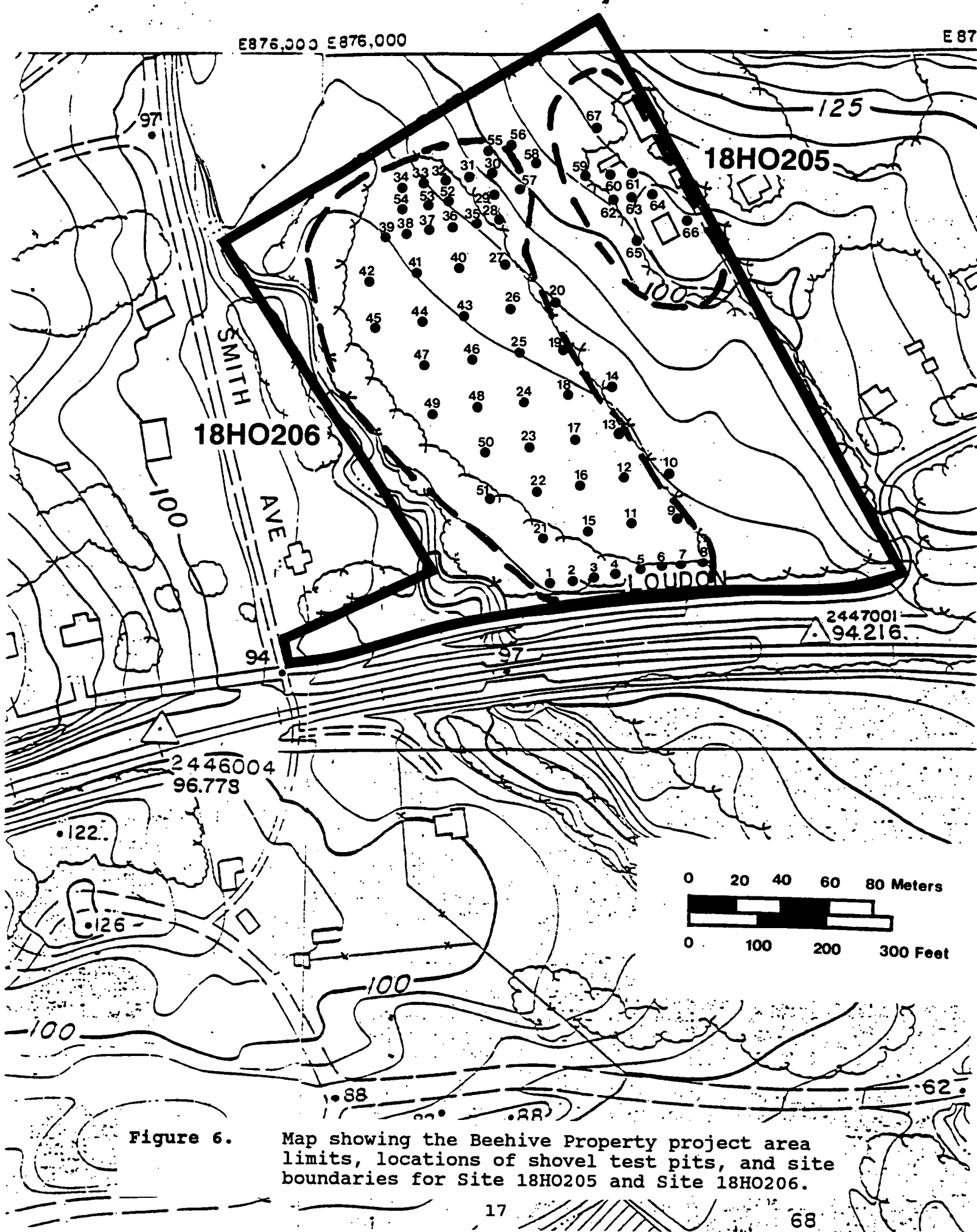


Figure 6.

Map showing the Beehive Property project area limits, locations of shovel test pits, and site boundaries for Site 18HO205 and Site 18HO206.

SHOVEL TEST PIT #5

A1/Ap 10YR 4/3 silt loam	
Apb 10YR 4/4 silt loam	Abrupt Boundary
A2/E 10YR 4/4 silt loam with manganese staining	Vague Boundary
B1 10YR 5/2 silty clay loam with heavy 7.5YR 5/8 mottling	Clear Irregular Boundary
B2 Gleyed 10YR 4/2 sandy clay loam	Abrupt Irregular Boundary

C - 10YR 4/1 medium to
coarse loamy sand w/ dense
gravel and pebbles

A1 10YR 5/4 silt loam	Clear Regular Boundary
Ap 10YR 5/6 silt loam	Abrupt Boundary
IC 10YR 5/6 fine sandy loam w/ 10YR 6/4 varving	Clear Regular Boundary
IIC 10YR 5/8 silt loam with manganese staining	Clear Regular Boundary
IIIC 10YR 5/3 silty clay loam with heavy 10YR 5/8 mottling	Clear Regular Boundary
IVAb Gleyed 10YR 4/3 clay loam	Clear Regular Boundary
IVB/C Predominantly 10YR 5/2 sandy clay loam with 10YR 5/8 mottling	Clear Boundary
IVC 10YR 5/1 coarse loamy sand	

Gravel Bed

SHOVEL TEST PIT #11

SHOVEL TEST PIT #49

A1 10YR 4/4 sandy loam	Clear Boundary
Ap 10YR 5/6 sandy loam	Abrupt Boundary
IC 10YR 5/8 silt loam	Clear Boundary
IIC 10YR 4/6 sandy loam	Clear Boundary
IIIC 7.5YR 4/6 sandy loam	Clear Boundary
IVAb 10YR 4/4 silt loam with gravel and pebbles	Vague Boundary
IVA2b 10YR 3/4 sandy loam with gravel and pebbles	Vague Boundary
IVA3b or A/C 10YR 4/6 fine loamy sand with pea gravel	

A1/Ap 10YR 3/4 fine sandy loam	Abrupt Boundary
B21t 7.5YR 5/8 sandy clay loam	Vague Boundary
B22t 10YR 5/8 sandy clay loam	

SHOVEL TEST PIT #79

Figure 7. Representative soil profile illustrations from
Site 18H0206.

buried A horizon approximately 10 cm to 30 cm thick, located at depths ranging from 40 cm to 120 cm below surface. In general, depth of the buried A below surface decreases eastward toward the floodplain/terrace interface.

Deposits below the buried A are tentatively interpreted as separate depositional (C horizons) episodes but may, in some cases, represent the lower portion of intact mineral horizons that form part of a paleosol related to the buried A layer. Interpretation of these horizons is tentative owing to the difficulty of excavating to depths at which they are found. Project scheduling prohibited the use of larger excavation units, and not all shovel test pits could be excavated to the basal layers containing channel or point bar deposits.

Lower terrace profiles are fairly consistent with that described as representative of the Woodstown series (Matthews and Hershberger 1968). Shovel test pits consistently contain A1 and Ap horizons characterized by 10YR 4/3 - 4/4 and 10YR 5/3 silt loam, or 10YR 4/4 fine sandy loam. The Ap is followed by an A2/E horizon in most shovel test pits to a depth ranging from 35 cm to 55 cm below surface. The A2/E horizon contains 10YR 4/6 - 5/6 and 10YR 6/4 silt loam, or 10YR 4/6 - 5/6 and 10YR 6/4 fine sandy loam. However, some shovel test pits have been plowed into the underlying B horizon. The B1 horizon is characterized as a 10YR 5/6 - 5/8 heavy silt or sandy loam. The underlying B2 contains 10YR 5/6 - 5/8 silty or sandy clay loam. In some shovel test pits located in the southern half of the terrace, an underlying C horizon consisting of somewhat unconsolidated sands and/or very compact gravels and pebbles was encountered. In most cases, and especially in the northern half of the lower terrace, the excavations were terminated in the B1 or B2 horizon. A five inch bucket auger core excavated from the base of Shovel Test Pit 29 revealed the presence of a buried B2t horizon at approximately 115 cm below ground surface suggesting the presence of residual soil horizons covered by old alluvial deposits. A marked absence of gravel in the profile suggests these deposits are not colluvial, despite the location of Shovel Test Pit 29 at the base of moderately steep slopes. Though contours on the project plan map indicate that the southeastern portion of the site is located within a floodplain setting, that portion of the site is in fact situated slightly above the floodplain on an eroded extension of the present day terrace indicated above the 85 foot contour interval. Profiles from Shovel Test Pits 5 - 8, 11 - 12, and 18, are similar to those observed in the northern portion of the site.

Approximate boundaries of the Beehive Site (18H0206) are defined by the overall distribution of prehistoric artifacts without respect to their stratigraphic context. Figure 8 shows the distribution of artifacts in a plowzone (Ap) context. Figure 9 shows the distribution of prehistoric artifacts from the A2/E and B1/B2 horizons. Figure 10 shows the distribution of prehistoric

18HO205

SMITH AVE

18HO206

POUNDON

2447001
94.216

2446004
96.778

122

126

100

100

82°

68°

62°

● = 0

○ = 1-5

△ = 6-10

▲ = 11-15

■ = 16-20

◇ = 21-25

◆ = 26+

0 20 40 60 80 Meters

0 100 200 300 Feet

• Figure 8.

Distribution of artifacts in the plowzone at Site 18HO206.

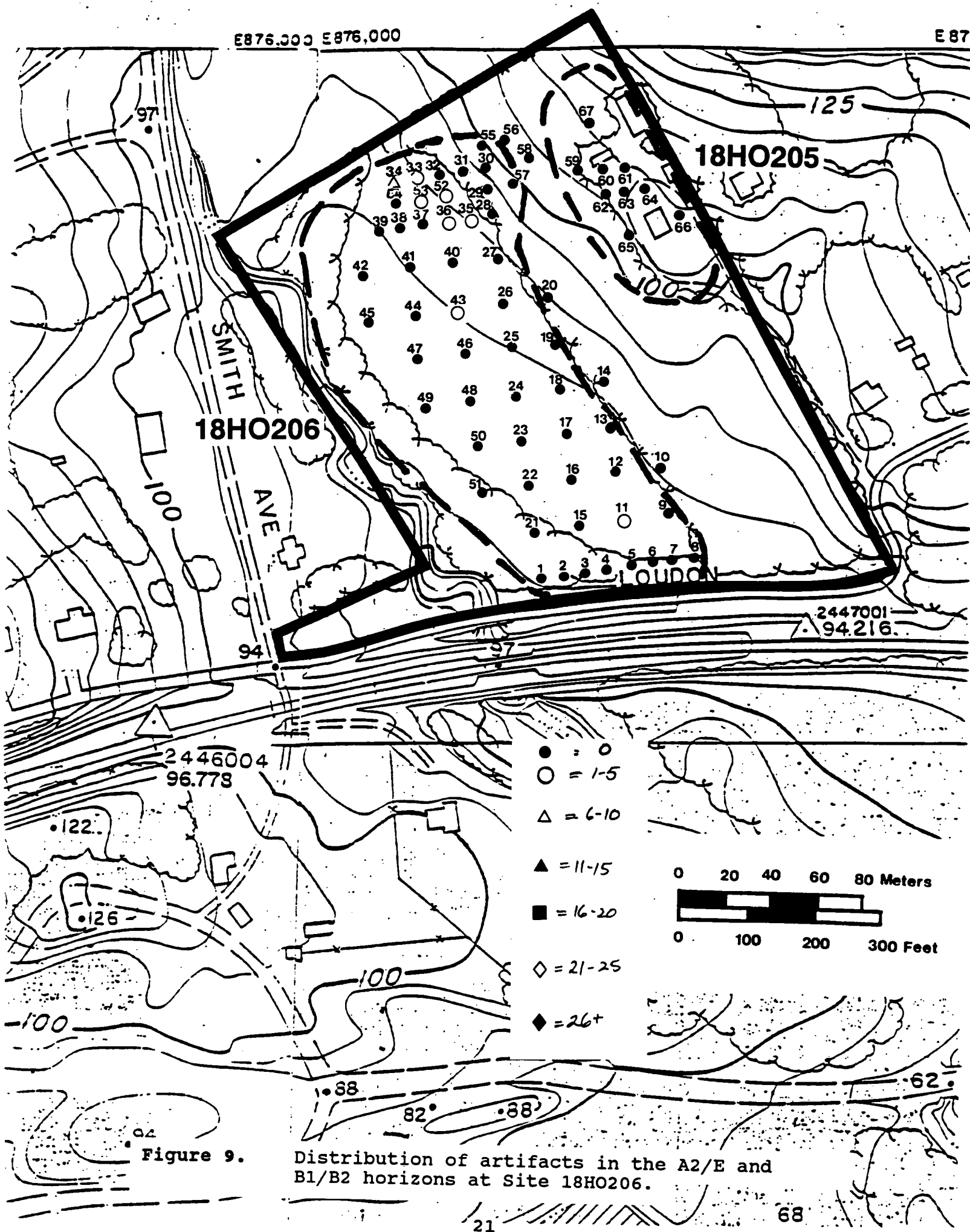
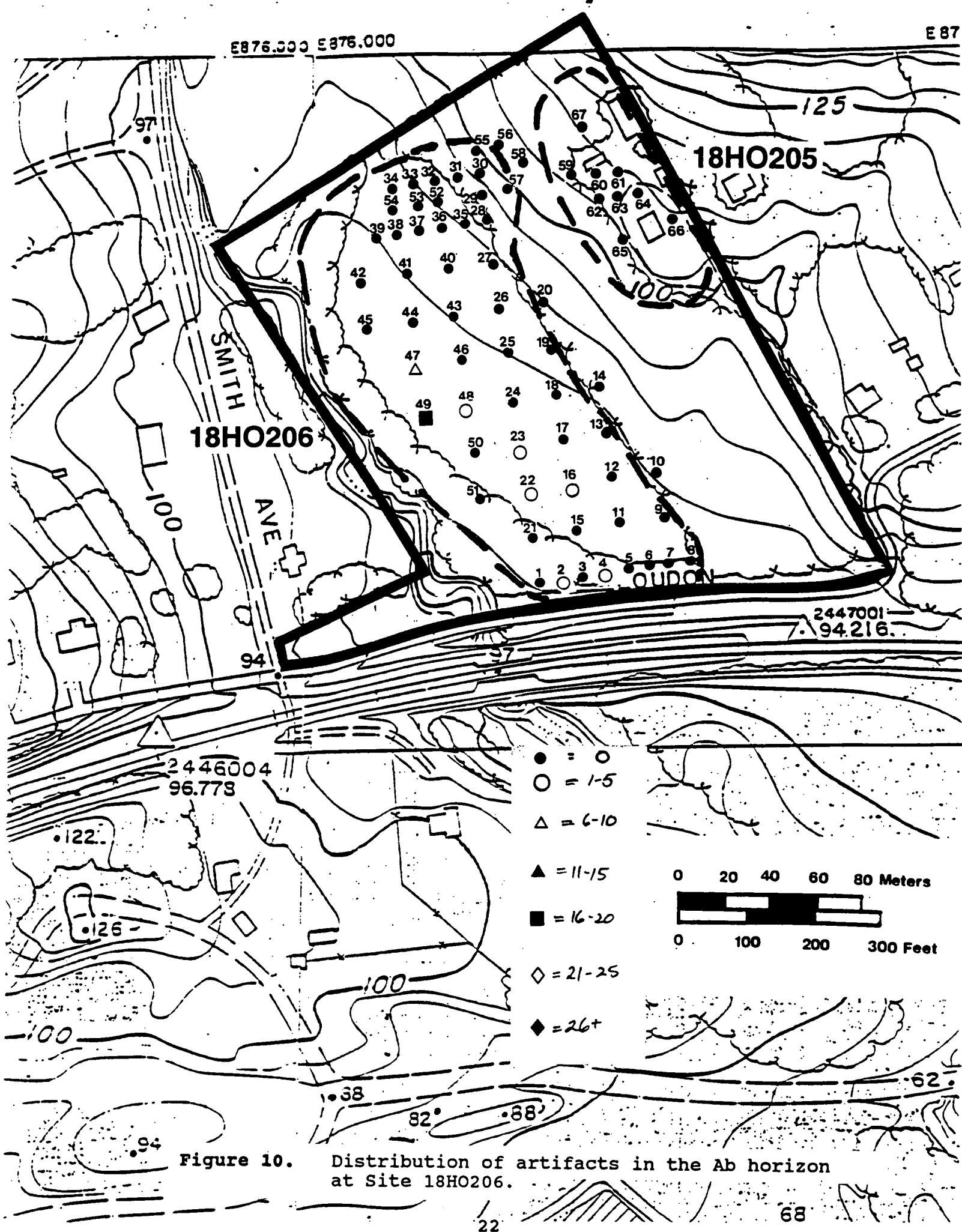


Figure 9.

Distribution of artifacts in the A2/E and B1/B2 horizons at Site 18HO206.



artifacts from the buried A (Ab) horizon. Distribution of prehistoric artifacts in levels below the buried A on the floodplain and in B/C horizons on the lower terrace is shown in Figure 11.

Several patterns become apparent when the artifact assemblage is viewed as separate units divided by floodplain and terrace environmental setting. Only 15 artifacts of 165 artifacts excavated from the floodplain setting were recovered from the plowzone as compared to 259 of the 290 artifacts recovered on the terrace. If the terrace concentration is contemporaneous with the materials recovered from the Ap horizon on the floodplain, the major focus of settlement during the Late Archaic sub-period at the site was located on the elevated terrace setting. Ratios of decortication flakes to non-decortication flakes in the A1/Ap horizon on the terrace is 1.06:1. The ratio of decortication flakes to non-decortication flakes in all levels combined in the terrace setting is not significantly different, with 1.07 decortication flakes to 1 non-decortication flake. Three cores, a hammerstone, one late stage biface fragment and a fragmentary Savannah River projectile point that appears to have been broken during manufacture suggest primary as well as secondary reduction activities took place in the terrace portion of the site.

On the floodplain, a ratio of 3.6 decortication flakes to 1 non-decortication flake is present in materials recovered from the A1/Ap. Debitage recovered from the buried A consisted only of decortication flakes. The ratio of decortication flakes to non-decortication flakes in levels below the buried A is 3:1. The buried A (Ab) and layers below the buried A also contained four cores, two hammerstones, 2 shatter fragments, and a chunk. No formal or ad hoc tools were present in the assemblage from the buried A and lower levels on the floodplain suggesting quarry and primary reduction activities focused on stream cobbles.

The Loudon Avenue Ruin Site (18HO205) (Figure 2 and Figure 6) was identified on the Beehive Property during surface reconnaissance of the upper terrace at the eastern project area boundary (Figure 6). Several structures consisting of a 20th century residence, and modern cinder block and frame outbuildings were present. A generous scatter of abandoned household appliances, children's bicycles, unidentifiable machine parts, paint buckets, and modern trash littered the vicinity of the structures.

Tall grass and weeds surrounded the immediate vicinity of the residential structure and outbuildings. Remaining areas were heavily eroded with moderately dense gravel and clay subsoil present on the ground surface. Little vegetation was present offering approximately 90 percent surface visibility. The aerial extent of the trash deposit apparent on the ground surface serves to define the site boundaries. No surface collection was obtained.

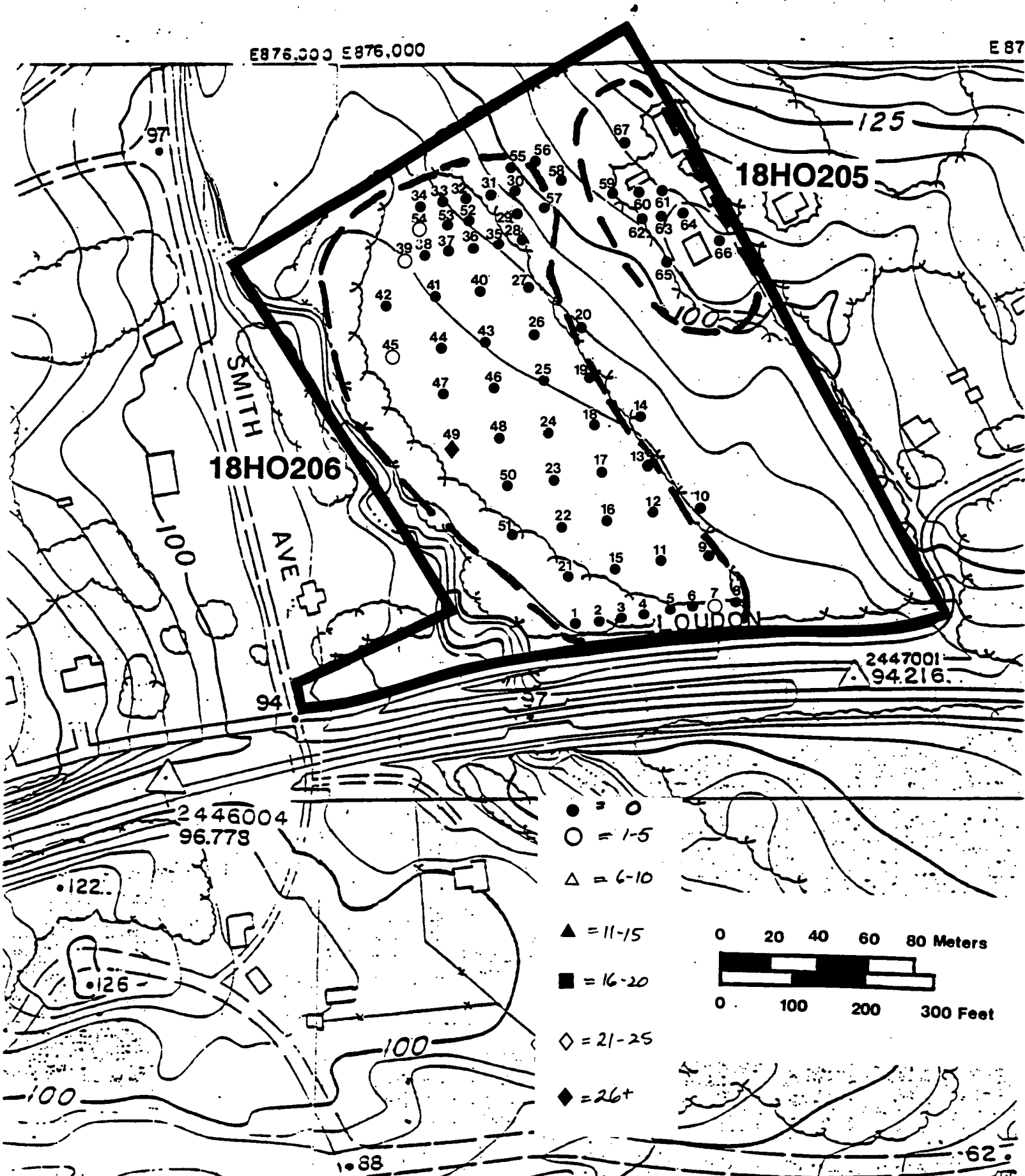


Figure 11.

Distribution of artifacts below the Ab horizon on the floodplain, and in the B/C horizons on the lower terrace at Site 18HO206.

SHOVEL TEST PIT #	HORIZON	EXCAVATED DEPTH	DECORTICATION FLAKES	INTERIOR FLAKES	SHATTER/ CHUNKS	CORES/ FRAGMENTS	FIRE CRACKED ROCK	BIFACES/ FRAGMENTS	HAMMERSTONES	OTHER TOOLS	TOTAL ARTIFACTS BY LEVEL	TOTAL ARTIFACTS FROM STP	ARTIFACTS FROM PLOWZONE	ARTIFACTS BELOW PLOWZONE
1												0		
2	IIAb	80-90	1	0	0	0	1	0	0	0	2	2	0%	100%
3												0		
4	IIAb	58-70	1	0	0	0	0	0	0	0	1	1	0%	100%
5	Ap	0-25	2	0	0	0	0	0	0	0	2			
5	Apb	25-35	0	1	0	0	0	0	0	0	1	3	100%	0%
6	Ap	10-30	2	1	0	0	0	0	0	0	3	3	100%	0%
7	Ap	0-25	1	0	0	0	0	0	0	0	1			
7	C/B	65-90	3	1	0	0	0	0	0	0	4	5	20%	80%
8	Ap	0-30	3	1	0	0	0	0	0	0	4	4	100%	0%
9	Ap	0-25	2	0	0	0	0	0	0	0	2	2	100%	0%
10												0		
11	Ap	0-32	1	0	0	0	0	0	0	0	1			
11	A2/B1	32-80	0	1	0	0	0	0	0	0	1	2	50%	50%
12	Ap	0-25	0	2	0	0	0	0	0	0	2	2	100%	0%
13												0		
14												0		
15												0		
16	IIAb	59-73	1	0	0	0	0	0	0	0	1	1	0%	100%
17	Ap	0-35	3	0	0	0	0	0	0	0	3	3	100%	0%
18	Ap	0-25	1	1	0	0	0	0	0	0	2	2	100%	0%
19	Ap	0-17	2	1	0	0	0	0	0	0	3	3	100%	0%
20												0		
21												0		
22	IIAb	60-80	2	0	0	0	0	0	0	0	2	2	0%	100%
23	Ap	0-25	1	0	0	0	0	0	0	0	1			
23	IIAb	60-70	2	2	0	0	0	0	0	0	4	5	20%	80%
24												0		
25	Ap	0-30	0	2	0	0	0	0	0	0	2	2	100%	0%
26	Ap	0-38	0	2	0	0	0	0	0	0	2	2	100%	0%
27	Ap	0-35	0	1	0	0	0	0	0	0	1	1	100%	0%
28												0		
29												0		
30												0		
31	Ap	0-25	1	0	0	0	0	0	0	0	1	1	100%	0%
32	Ap	0-30	0	9	0	0	0	0	0	0	9	9	100%	0%
33	Ap	0-25	8	4	1	1	0	0	0	0	14			
33	A2/E	25-35	0	0	1	0	0	0	0	0	1	15	93%	7%
34	Ap/Apb	0-35	63	39	6	1	0	1	0	0	110			
34	IIIAp	35-50	3	10	0	0	0	0	0	0	13			
34	B1/B2	50-60	3	2	1	0	0	0	0	0	6	129	95%	5%

Table 1. Distribution of artifacts by stratigraphic horizon and excavation level at Site 18HO206.

SHOVEL TEST PIT #	HORIZON	EXCAVATED DEPTH	DECORTICATION FLAKES	INTERIOR FLAKES	SHATTER/ CHUNKS	CORES/ FRAGMENTS	FIRE CRACKED ROCK	BIFACES/ FRAGMENTS	HAMMERSTONES	OTHER TOOLS	TOTAL ARTIFACTS BY LEVEL	TOTAL ARTIFACTS FROM STP	ARTIFACTS FROM FLOWZONE	ARTIFACTS BELOW FLOWZONE
35	AP	0-28	1	3	0	0	0	0	0	0	4			
35	A2/E	28-38	1	0	0	0	0	0	0	0	1	5	80%	20%
36	AP	0-30	1	1	0	0	0	0	0	0	2			
36	B1	30-60	1	0	0	0	0	0	0	0	1	3	68%	32%
37	AP	0-30	0	1	0	0	0	0	0	0	1	1	100%	0%
38												0		
39	AP	0-27	1	0	0	0	0	0	0	0	1			
39	IVC/B	83-93	1	3	0	0	0	0	0	0	4	5	20%	80%
40												0		
41												0		
42	APb	10-32	1	0	0	0	0	0	0	0	1	1	100%	0%
43	AP	0-28	0	1	0	0	0	0	0	0	1			
43	A2/E	28-42	0	1	0	0	0	0	0	0	1			
44												1	50%	50%
45	APb	21-48	3	0	0	0	0	0	0	0	3			
45	I11C/B	77-87	2	0	0	0	0	0	0	0	2	5	60%	40%
46	AP	0-30	1	0	0	0	0	0	0	0	1	1	100%	0%
47	AP	0-28	0	0	0	1	0	0	0	0	1			
47	Ab	52-82	8	1	0	1	0	0	0	0	10	11	10%	90%
48	I1C	42-69	0	1	0	0	0	0	0	0	1			
48	I11Ab	69-88	1	0	0	0	1	0	0	0	2	3	0%	100%
49	APb	15-33	0	1	0	0	0	0	0	0	1			
49	I11Ab	55-83	16	0	0	0	2	0	0	0	18			
49	I11C	83-90	11	0	0	0	0	0	1	0	12			
49	I11C	90-100	4	1	0	0	0	0	0	0	5			
49	IVC	100-110	9	4	0	0	0	0	0	0	13			
49	IVC	110-120	18	9	0	1	0	0	0	0	28			
49	VC	120-130	7	1	0	1	0	0	0	0	9			
49	VC	130-135	28	9	3	1	1	0	1	0	43	129	1%	99%
50												0		
51	AP	0-30	2	1	0	0	0	0	0	0	3	3	100%	0%
52	AP	0-23	1	2	0	0	0	0	0	0	3			
52	A2/E	23-33	0	3	0	0	0	0	0	0	3	6	50%	50%
53	AP	0-30	6	8	0	1	0	1	1	0	17			
53	A2/E	30-40	1	0	0	0	0	0	0	0	1			
53	A2/E	40-50	0	1	0	0	0	0	0	0	1	19	89%	11%
54	AP	0-25	24	32	0	0	0	0	0	0	56			
54	C/B	25-35	2	1	0	0	0	0	0	0	3	59	95%	5%
55	AP	5-15	1	0	0	0	0	0	0	0	1	1	100%	0%
56												0		
57	AP	0-20	1	0	0	0	0	0	0	0	1	1	100%	0%

Table 1 (continued). Distribution of artifacts by stratigraphic horizon and excavation level at Site 18HO206.

Nine shovel test pits were excavated within the site area (Figure 6). Seven of the shovel test pits contained 127 historic artifacts that date from the late 19th to middle 20th century (Appendix III). All of the artifacts were confined to a very shallow A horizon developed from an old plowzone (Appendix IV). Fifty-seven percent of the assemblage consists of architectural materials comprised of colorless window glass (n=32), wire nails (n=12), unidentifiable nails (n=1), oxidized ferrous metal fragments (n=4), asphalt roofing shingles (n=7), brick (n=15), and glazed sewer tile (n=1). Coal and cinders comprise twenty percent of the artifacts (n=26). Nineteen percent of the recovered sample consists of machine made and otherwise undiagnostic bottle and container glass that is colorless (n=15) and variously colored (n=8). The remaining three percent of the artifacts consist of whiteware (n=1), styrofoam (n=3), and unidentifiable bone (n=1).

None of the shovel test pits contained artifacts in an undisturbed context. The artifact assemblage is chronologically and functionally consistent with the interpretation that the site represents a domestic occupation dating primarily to the 20th century. This interpretation is supported by historic maps that do not show a structure on the property before 1957 (USGS 1974). Given the ubiquity of this resource type and lack of potential for undisturbed archeological deposits in the back and side yards of the residence structure, the site is not considered potentially significant and no additional archeological work is recommended.

Schultz Farm Property

The Schultz Farm #1 Site (18HO203) (Figure 2 and Figure 12) was identified during shovel testing on the floodplain and terraces of the property south of Shallow Run. It occupies approximately 10 acres (4.04 Ha) as defined by the presence of 339 prehistoric artifacts recovered from 57 of 90 shovel test pits, and 278 historic artifacts recovered from 34 of the 90 shovel test pits excavated on the property south of Shallow Run (Appendix III). The approximate site boundary is defined by the physical distribution of historic and prehistoric artifacts, topographic features in the current landscape, and limits of modern disturbance.

One chronologically sensitive projectile point dating to the Early Woodland prehistoric sub-period was recovered, but other prehistoric components may be present. The prehistoric component is present over the entire project area. The historic component is confined to an area at the eastern property boundary, and is associated with a historic structure torn down by the current owners to make way for a modern brick dwelling. It occupies an area in the vicinity of a "Paper Mill" depicted on historic maps (Martenet 1960a, 1860b, 1865, 1885; Hopkins 1878). The recovered historic artifacts date from the late 18th to mid-20th centuries and reflect domestic use of the site area rather than industrial activities. Though several historic maps indicated structures

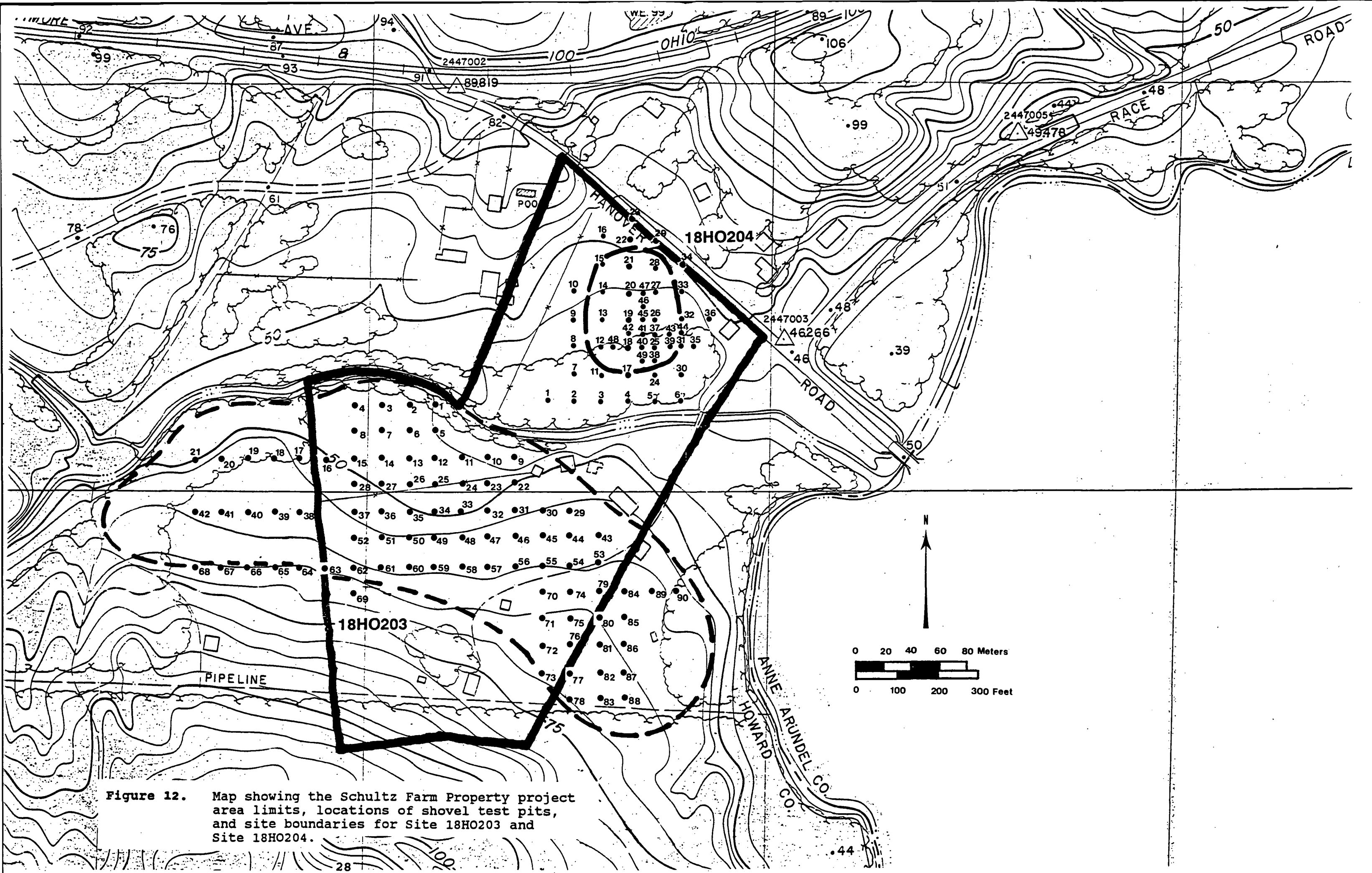


Figure 12. Map showing the Schultz Farm Property project area limits, locations of shovel test pits, and site boundaries for Site 18HO203 and Site 18HO204.

reflecting residential use are depicted adjacent to the project area, only the Paper Mill is shown in the near vicinity.

Several different soil profiles were evident on the floodplain and terraces south of Shallow Run, and suggest a somewhat dynamic and ongoing process of stream movement and deposition (Appendix IV) (Figure 13). All shovel test pits excavated on the floodplain contain A1 and Ap horizons, usually excavated as one stratigraphic layer, characterized by 10YR 4/3 - 4/6 and 10YR 5/4 - 5/6 silt loam or fine sandy loam. Buried plowzones were present in Shovel Test Pits 5, 6, 12, and 13.

Beneath the plow disturbed layer, floodplain profiles generally exhibit well developed mineral horizons capped by flood deposits as demonstrated by profiles from Shovel Test Pits 5, 6, 8, 9, 10, and 33. This group contains an A2/E horizon described as 10YR 4/4 - 4/6 or 10YR 5/6 silt loam, and 10YR 4/4 - 4/6 or 10YR 5/8 sandy loam, capping a B or C horizon. The B horizons vary in color and texture and include 10YR 6/6 heavy silt loam, 10YR 5/2 silty clay loam, 10YR 5/6 sandy loam, and 10YR 4/1 sandy clay loam. The C Horizons in this group are characterized in general by medium to coarse sands and loamy sands grading into dense to very dense cobbles, pebbles, and gravel derived from old stream channel and point bar deposits.

Other profiles as demonstrated by Shovel Test Pits 11 and 12 contain one or more alluvially derived C horizons representing distinct depositional episodes capping a 10YR 4/3 silt loam or 10YR 4/3 fine sandy loam buried A (Ab) horizon, followed by weakly developed B horizons, or C horizons derived from channel or point bar deposits. In one case, the buried A in Shovel Test Pit 4 was followed by a series of weathered mineral horizons that included a second buried A and subsequent mineral horizons. A few profiles as demonstrated by Shovel Test Pits 13, 14, and 25, contained well-developed argillic B horizons resting upon channel and point bar deposits.

Profiles from the elevated terraces contain older, weathered deposits that appear to be residual in some places or derived from more recent alluvium in others. Most shovel test pits west of Shovel Test Pit 45 contain buried A (Ab) horizons and/or A2/E horizons that have been truncated by plowing. All of the shovel test pits east of Shovel Test Pit 45 contain plowzones overlying poorly-developed argillic B horizons, Cambic B horizons, or C horizons containing dense gravels, pebbles, and cobbles. All of the terrace profiles seem to indicate that the terrace deposits derive from post Pleistocene alluvial deposition. No clear evidence of eolian deposited loess material was encountered. The presence of artifacts in Shovel Test Pit 49 at depths of 95 to 125 cm below ground surface suggests that the soils above the gravel and cobble beds encountered in most shovel test pits postdate early Pleistocene fluvial deposits. However, it is not known if the

IC 10YR 4/4 clay loam	Abrupt Boundary
Apb 10YR 4/4 fine sandy loam	Abrupt Boundary
IIC Heavily varved 10YR 4/6 fine to medium loamy sand with 10YR 5/8 mottling	Clear Regular Boundary
IIIAb Gleyed 10YR 3/2 sandy loam with iron and manganese staining	Clear Regular Boundary
IIIC 10YR 4/4 coarse loamy sand with 10YR 5/8 mottling	Clear Regular Boundary
IVC 7.5YR 5/8 loamy sand with numerous pebbles and gravel	Vague Boundary
VC 10YR 5/8 loamy sand with dense pebbles and gravel	

Gravel Bar
SHOVEL TEST PIT #49

A1/Ap 10YR 3/4 silt loam	Abrupt Boundary
IC Gleyed 10YR 5/4 silt loam; manganese staining	Vague Boundary
IIC Gleyed 10YR 5/6 silt loam with iron and manganese staining	Clear Regular Boundary
IIIC 10YR 3/3 silt loam	Clear Regular Boundary
IVC Gleyed 10YR 4/6 silt loam	

SHOVEL TEST PIT #21

A1/Ap 10YR 4/4 silt loam	Abrupt Boundary
A2/E 10YR 5/6 silt loam	Vague Boundary
B2 10YR 5/8 silty clay loam	

SHOVEL TEST PIT #31

A1/Ap 10YR 4/4 silt loam	Abrupt Boundary
B1 10YR 5/8 silty clay loam	

B2t Predominantly 10YR 5/8
silty clay loam with pockets of
of 10YR 7/1 clay
SHOVEL TEST PIT #32

Figure 13. Representative soil profile illustrations from Site 18HO203.

gravel and cobble beds represent old channel and point bar deposits associated with Shallow Run, or derive from early Pleistocene and earlier, unconsolidated fluvial deposits.

Prehistoric artifacts recovered from the shovel test pits consist predominantly of quartz debitage (166 decortication flakes, 121 interior flakes, 8 shatter fragments, 5 chunks). Six quartz cores, 3 quartz bifaces, 7 quartzite hammerstones, a gneiss hammerstone, an ovate-based, quartz projectile point typed as Piscataway, a possible groundstone tool fragment of gneiss, 4 rhyolite flakes, and 16 fire-cracked rock were also recovered. Fifty-six percent (n=191) of the prehistoric artifacts were recovered below the plowzone in 28 of the 56 shovel test pits containing prehistoric artifacts.

Forty two of the ninety excavated shovel test pits contained 148 artifacts in a plowzone context. Their distribution is depicted in Figure 14, and Table 2. The majority consisted of quartz decortication flakes (n=70) and quartz interior flakes (n=56). Additionally, 4 quartz shatter fragments, 4 quartz chunks, 2 quartz cores, 5 fire-cracked rock, 3 quartzite hammerstones and a gneiss hammerstone, and three rhyolite flakes were recovered. Only 13 of the 42 shovel test pits with plowzone artifacts contained sub-plowzone deposits, with only Shovel Test Pits 6 and 20 containing appreciable densities of materials below the plowzone. Overall, most of the 42 shovel test pits exhibited low to very low densities of plowzone artifacts. However, those that did contain more than 5 artifacts, also contained all of the fire cracked rock, hammerstones, and cores recovered from the plowzone across the site. The higher density areas occur in the vicinity of Shovel Test Pits 6 and 9 on the floodplain adjacent to Shallow Run, Shovel Test Pits 16, 20, and 21 on the first terrace at the western project area limits, Shovel Test Pits 31 and 33 on the upper terraces overlooking Shallow Run, and at the eastern project limits overlooking Deep Run in Shovel Test Pits 53, and 79 - 81.

Shovel Test Pit 6 contained 6 quartz flakes in the plowzone with 24 quartz flakes and a quartzite hammerstone recovered from three 10 cm levels below the plowzone. Shovel Test Pit 9 contained 6 quartz flakes, a quartzite hammerstone, and a quartz core. Only 1 sub-plowzone artifact was recovered from shovel test pit 9.

Shovel Test Pit 16 contained 2 fire-cracked rocks, a quartz core, and five quartz flakes, with no artifacts recovered below the plowzone. Shovel Test Pit 20 contained only quartz flakes (5) in the plowzone with five quartz flakes recovered from two 10 cm levels below the plowzone. Shovel Test Pit 21 contained one fire-cracked rock and four quartz flakes in the plowzone, with 2 quartz flakes recovered from a 10 cm level vertically separated from the plowzone deposit by 20 cm of sterile soil.

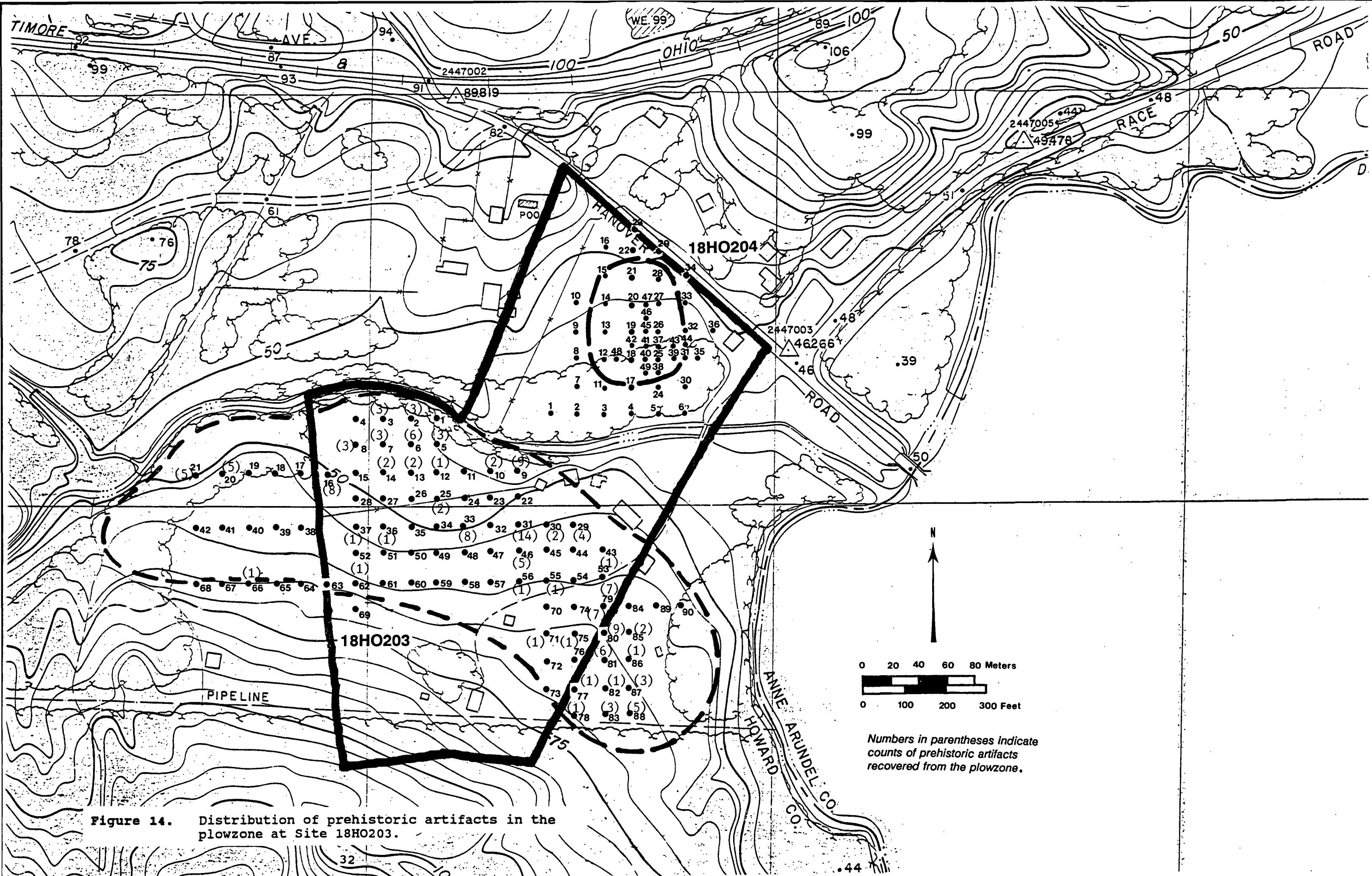


Figure 14. Distribution of prehistoric artifacts in the plowzone at Site 18HO203.

SHOVEL TEST PIT #	HORIZON	EXCAVATED DEPTH	DECORTICATION FLAKES	INTERIOR FLAKES	SHATTER/ CHUNKS	CORES/ FRAGMENTS	FIRE CRACKED ROCK	BIFACES/ FRAGMENTS	HAMMERSTONES	OTHER TOOLS	TOTAL ARTIFACTS BY LEVEL	TOTAL ARTIFACTS FROM STP	ARTIFACTS FROM PLOWZONE	ARTIFACTS BELOW PLOWZONE
1												0		
2	AP	0-30	3	0	0	0	0	0	0	0	3			
2	Ab	90-120	5	0	0	0	0	0	0	0	5			
2	C	120- 130	4	0	0	1	0	0	0	0	5	13	23%	77%
3	AP	0-30	2	1	0	0	0	0	0	0	3			
3	C/B	60-65	4	1	0	0	0	0	0	0	5			
3	C	65-75	2	2	0	0	0	0	0	0	4	12	25%	75%
4	IIA2	62-72	1	0	0	0	0	0	0	0	1			
4	IIAb	82-92	3	0	0	0	0	0	0	0	3	4	25%	75%
5	AP	25-35	1	1	1	0	0	0	0	0	3			
5	A2/E	35-50	0	0	0	0	0	0	0	1	1			
5	B1	50-62	0	1	0	0	0	0	0	0	1	5	60%	40%
6	AP	0-24	2	4	0	0	0	0	0	0	6			
6	A2/E	24-34	5	7	0	0	0	0	1	0	13			
6	A2/E	34-44	2	8	0	0	0	0	0	0	10			
6	A2/E	44-50	2	0	0	0	0	0	0	0	2	31	19%	81%
7	AP	0-20	1	2	0	0	0	0	0	0	3	3	100%	0%
8	AP	0-30	1	2	0	0	0	0	0	0	3	3	100%	0%
9	AP	0-23	2	3	1	1	0	0	1	0	8			
9	A2/E	23-33	1	0	0	0	0	0	0	0	1	9	89%	11%
10	AP	0-38	1	1	0	0	0	0	0	0	2	2	100%	0%
11	IVAb	61-73	3	2	0	0	0	0	1	0	6	6	0%	100%
12	AP	0-24	0	0	1	0	0	0	0	0	1			
12	IIAb	44-50	0	0	0	0	0	0	1	0	1	2	50%	50%
13	AP	27-45	1	1	0	0	0	0	0	0	2	2	100%	0%
14	AP	0-23	1	1	0	0	0	0	0	0	2	2	100%	0%
15												0		
16	AP	0-25	2	1	2	1	2	0	0	0	8	8	100%	0%
17	IIAb/ IIA2	50-60	2	0	0	0	1	0	0	0	3			
17	IIAb	60-70	2	2	0	1	4	0	0	0	9			
17	IIAb	70-80	0	0	0	0	3	1	0	0	4	16	0%	100%
18	AP	7-37	2	0	0	0	0	0	0	0	2			
18	Ab	36-50	0	2	0	0	0	0	0	1	3			
18	Ab	50-60	4	0	0	0	0	0	0	0	4			
18	Ab	60-70	1	1	0	0	2	0	0	0	4	13	15%	85%
19												0		
20	AP	0-27	4	0	1	0	0	0	0	0	5			
20	Ab	27-33	2	2	0	0	0	0	0	0	4			
20	A2/E	33-43	0	1	0	0	0	0	0	0	1	10	50%	50%
21	AP	0-30	2	2	0	0	1	0	0	0	5			
21	Ab	50-60	2	0	0	0	0	0	0	0	2	7	71%	29%
22												0		
23	C	50-60	0	1	0	0	0	0	0	0	1	1	0%	100%
24												0		

Table 2. Distribution of artifacts by stratigraphic horizon and excavation level at Site 18HO203.

SHOVEL TEST PIT #	HORIZON	EXCAVATED DEPTH	DECORTICATION FLAKES	INTERIOR FLAKES	SHATTER/ CHUNKS	CORES/ FRAGMENTS	FIRE CRACKED ROCK	BIFACES/ FRAGMENTS	HAMMERSTONES	OTHER TOOLS	TOTAL ARTIFACTS BY LEVEL	TOTAL ARTIFACTS FROM STP	ARTIFACTS FROM PLOWZONE	ARTIFACTS BELOW PLOWZONE
25	AP	0-25	2	0	0	0	0	0	0	0	2	2	100%	0%
26												0		
27												0		
28	IIAb	69-75	2	0	0	0	0	0	0	0	2	2	0%	100%
29	AP	0-33	4	0	1	0	0	0	0	0	5	5	100%	0%
30	AP	0-20	1	0	1	0	0	0	0	0	2	2	100%	0%
31	AP	0-30	5	7	0	0	1	0	1	0	14			
31	Ab	30-40	1	0	0	0	0	0	0	0	1			
31	IC	52-65	2	0	0	0	0	0	0	0	2			
31	IIc	65-75	0	0	0	0	0	0	1	0	1	18	77%	23%
33	AP	0-30	5	0	0	0	1	0	1	1	8	8	100%	0%
34	Ab	48-75	19	5	0	2	0	0	0	0	26	26	0%	100%
35	A2/E	28-38	0	0	1	0	0	0	0	0	1			
35	IIAb	58-68	2	0	0	0	0	0	0	0	2			
35	IIA2/E	68-78	2	1	0	0	0	0	0	0	3			
35	IIA2/E	78-98	0	1	0	0	0	0	0	0	1	7	0%	100%
36	AP	14-24	1	0	0	0	0	0	0	0	1			
36	IIAb	84-94	0	2	1	0	0	0	0	0	3			
36	IIA2/E	94-104	2	1	1	0	0	0	0	0	4	8	13%	87%
37	AP	20-30	1	0	0	0	0	0	0	0	1	1	100%	0%
38												0		
39	Ab	40-50	1	1	0	0	0	0	0	0	2			
39	Ab	50-60	5	4	0	0	0	0	0	0	9			
39	Ab	60-70	1	4	0	0	0	0	0	0	5			
39	A2/E	70-90	1	1	0	0	0	0	0	0	2	18	0%	100%
40	IIAb	81-91	0	1	0	0	0	0	0	0	1	1	0%	100%
41	VAb	60-70	0	5	0	0	0	1	0	0	6			
41	VIAb	70-80	1	1	0	0	0	0	0	0	2			
41	VIAb	80-90	2	1	0	0	0	0	0	0	3	11	0%	100%
42	A2/E	43-53	0	0	1	0	0	0	0	0	1			
42	IIAb	73-83	1	0	0	0	0	0	0	0	1	2	0%	100%
43	AP	0-20	1	0	0	0	0	0	0	0	1	1	100%	0%
44												0		
45	IIAb	47-59	0	2	0	0	0	0	0	0	2	2	0%	100%
46	AP	0-29	4	1	0	0	0	0	0	0	5			
46	APb	29-42	0	1	0	0	0	0	0	0	1			
46	Ab	42-60	3	2	0	0	0	0	0	0	5	11	45%	55%
47												0		
48												0		
49	IVAb	94-104	1	0	0	0	0	0	0	0	1			
49	IVAb	114	1	3	0	0	0	0	0	0	4			
49	IVAb	114-	0	0	0	0	1	0	0	0	1	6	0%	100%
50	IIAb	70-87	1	0	1	0	0	0	0	0	2	2	0%	100%
51	A2/E	20-30	1	0	0	0	0	0	0	0	1			
51	A2/E	50-60	2	0	0	0	0	0	0	0	2			
51	A3	70-80	0	1	0	0	0	0	0	0	1	4	0%	100%

Table 2 (continued). Distribution of artifacts by stratigraphic horizon and excavation level at Site 18HO203.

SHOVEL TEST PIT #	HORIZON	EXCAVATED DEPTH	DECORTICATION FLAKES	INTERIOR FLAKES	SHATTER/ CHUNKS	CORES/ FRAGMENTS	FIRE CRACKED ROCK	BIFACES/ FRAGMENTS	HAMMERSTONES	OTHER TOOLS	TOTAL ARTIFACTS BY LEVEL	TOTAL ARTIFACTS FROM STP	ARTIFACTS FROM PLOWZONE	ARTIFACTS BELOW PLOWZONE
52	Ap	17-27	0	1	0	0	0	0	0	0	1	1		
52	Ab	37-49	0	0	0	0	0	0	0	1	1	2	50%	50%
53	Ap	0-25	3	0	0	0	0	0	0	0	3			
53	Apb	25-52	4	0	0	0	0	0	0	0	4	7	100%	0%
54												0		
55	Ap	0-15	1	0	0	0	0	0	0	0	1	1	100%	0%
56	Apb	0	1	0	0	0	0	0	0	1	1	1	100%	0%
57												0		
58												0		
59												0		
60												0		
61												0		
62												0		
63												0		
64												0		
65												0		
66	Ap	0-33	1	0	0	0	0	0	0	0	1	1	100%	0%
67												0		
68												0		
69												0		
70												0		
71	Apb	17-26	1	0	0	0	0	0	0	0	0	1	100%	0%
72												0		
73												0		
74												0		
75	Ap	0-17	1	0	0	0	0	0	0	0	1	1	100%	0%
76												0		
77	Ap	0-22	1	0	0	0	0	0	0	0	1	1	100%	0%
78	Ap	0-25	1	0	0	0	0	0	0	0	1	1	100%	0%
79	Ap	0-21	3	4	0	0	0	0	0	0	7	7	100%	0%
80	Ap	0-28	1	8	0	0	0	0	0	0	9	9	100%	0%
81	Ap	0-20	2	4	0	0	0	0	0	0	6	6	100%	0%
82	Ap	0-42	0	1	0	0	0	0	0	0	1	1	100%	0%
83	Ap	0-20	1	2	0	0	0	0	0	0	3	3	100%	0%
84												0		
85	Ap	0-20	2	0	0	0	0	0	0	0	2	2	100%	0%
86	Ap	0-17	1	0	0	0	0	0	0	0	1	1	100%	0%
87	Ap	0-30	1	2	0	0	0	0	0	0	3	3	100%	0%
88	Ap	0-24	3	2	0	0	0	0	0	0	5	5	100%	0%

Table 2 (continued). Distribution of artifacts by stratigraphic horizon and excavation level at Site 18HO203.

One fire-cracked rock, a quartzite hammerstone, and 12 quartz flakes were recovered from the plowzone of Shovel Test Pit 31. The shovel test pit also contained three quartz flakes and a quartzite hammerstone from three 10 cm levels below the plowzone. Shovel Test Pit 33 contained a fire-cracked rock, one quartzite and one gneiss hammerstone and 5 quartz flakes, with no artifacts recovered below the plowzone.

The remaining shovel test pits are oriented toward Deep Run and occupy the highest portion of a broad terrace. Shovel test pits in this area revealed only debitage with most containing between one and three quartz flakes. Three rhyolite flakes were recovered in this vicinity and constitute the entirety of the rhyolite recovered from the site. Shovel Test Pits 53, and 79 - 81 contained between 6 and 9 quartz flakes. None of the shovel test pits in this area at the eastern project limits contained artifacts below the plowzone.

Horizontal and vertical distributions of artifacts above and below the plowzone suggest that the plowzone materials may be chronologically distinct from the sub-plowzone deposits in at least one area of the site as demonstrated by vertical separation of deposits in Shovel Test Pit 21, and by the absence of plowzone artifacts in shovel test pits, discussed below, that contain artifacts in sub-plowzone context. Positive correlation of the locations of fire-cracked rock, hammerstones, and cores with areas containing markedly higher densities of artifacts suggests that activity areas or chronologically distinct components may be discernable within the plowzone assemblage. However, concentrations in the plowzone do not correlate well with density and distribution of artifact deposits in sub-plowzone context.

Four horizontally discrete areas containing higher densities of artifacts below the plowzone are present (Figure 15). Cluster 1 is located on the first terrace overlooking Shallow Run west of the western project area boundary. Shovel test Pits 17 and 39 contained artifacts in a series of poorly expressed buried A (Ab) horizons between 40 and 90 cm below ground surface. Neither pit contained artifacts in the plowzone. Shovel Test Pit 39 contained 18 quartz flakes. In addition to 6 quartz flakes, Shovel Test Pit 17 contained 8 fire-cracked rocks, a quartz core, and the mid-section fragment of a preform stage quartz biface. Shovel Test Pit 17 contained 50 percent of the total number of fire-cracked rocks recovered from the entire assemblage at Site 18HO203. Shovel testing along the southern margin of the terrace, at the base of a series of steeply ascending footslopes, recovered only one possible quartz flake from the plowzone of Shovel Test Pit 66.

Other shovel test pits excavated on the terrace west of the project area boundary contained quartz flakes, and a very thin scatter of late 19th and early to middle 20th century artifacts confined to the plowzone. All of the floodplain and portions of

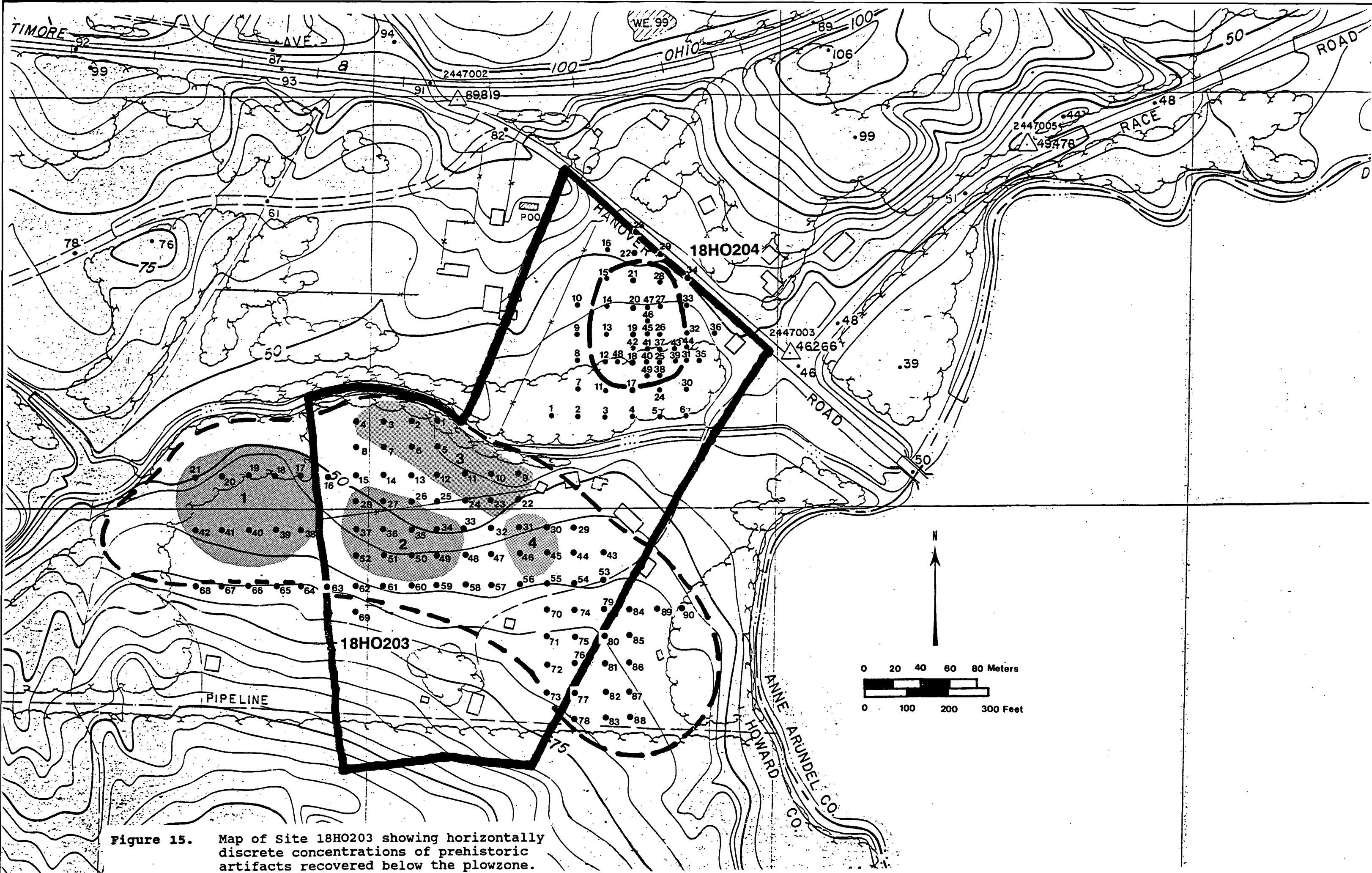


Figure 15. Map of Site 18HO203 showing horizontally discrete concentrations of prehistoric artifacts recovered below the plowzone.

the terrace overlooking Shallow Run in the southwestern portion of the project area have been subject to deep gravel and sand mining operations. The historic artifacts are discussed later on, in the context of other historic resources identified during the survey.

The western boundary of Site 18H0203 is defined by the westward physical limits of the terrace that terminates at the mouth of a steep sided drainage ravine emptying to Shallow Run. No temporally sensitive artifacts were recovered from this portion of the terrace, but the archeological deposits may be related to deposits associated with a second peak in artifact density distribution - defined as Cluster 2 (Figure 15) - on the eastward extension of the terrace.

Artifact density in Cluster 2 peaks in Shovel Test Pit 34, with shovel test pits to the west along the terrace containing moderate densities of artifacts below the plowzone. Shovel Test Pit 34 contained 24 quartz flakes and 2 core fragments in a buried A (Ab) horizon 48 to 75 cm below ground surface. Shovel Test Pit 49 contained 5 quartz flakes between 94 and 114 cm and a fire-cracked rock between 114 and 124 cm below surface. Shovel test pits to the west (Shovel Test Pits 35, 36, 50, and 51) contained fewer artifacts, but all were recovered from Ab and A2/E horizons below the plowzone. Shovel test pits surrounding this cluster contained no artifacts in any context (Shovel Test Pits 24, 26, 27, 48, 58, 59, 60, 61, and 62), or contained artifacts exhibiting very low densities (Shovel Test Pits 25, 28, 33, 37, and 52). Of the surrounding shovel test pits containing low densities of artifacts, only Shovel Test Pits 52 and 28 contained artifacts below the plowzone. Shovel Test Pit 28 contained 2 quartz flakes in a buried A (Ab) horizon 69 to 75 cm below surface; Shovel Test Pit 52 contained the Piscataway projectile point fragment in a buried A (Ab) horizon 37 to 49 cm below surface.

In the intervening area between Cluster 2 and Cluster 1 at the western project area boundary, only Shovel Test Pit 16 contained artifacts. Three quartz flakes, 2 quartz chunks, a quartz core fragment, and 3 fire-cracked rocks were recovered from the plowzone (Ap) of Shovel Test Pit 16. Shovel Test Pits 38 and 63 contained no prehistoric artifacts, and Shovel Test Pits 17 and 39 contained no prehistoric artifacts in the plowzone, suggesting that there is horizontal separation between Cluster 1 and Cluster 2. The Piscataway projectile point in Shovel Test Pit 52 may or may not be associated with the cluster adjacent to Shovel Test Pit 34. Because transit elevations were not taken across the ground surface, it is not possible to demonstrate relationships between the various strata, and thus their contents, across the site. However, it does appear from the vertical distributions of artifacts between strata in each shovel test pit, that there is vertical separation and strong potential for portions of the site to contain stratified archeological deposits.

Another peak in the density distribution below the plowzone occurs in Shovel Test Pit 6, associated with Cluster 3 (Figure 15), on the floodplain directly adjacent to Shallow Run. Shovel Test Pit 6 contained 24 quartz flakes and a quartzite hammerstone in an A2/E horizon between 24 and 50 cm below ground surface. Only six quartz flakes were recovered from the upper Ap and Apb horizons of that unit suggesting the bulk of the archeological deposits with higher densities in that area have not been dramatically affected by plow disturbance. In Shovel Test Pit 2, 9 quartz flakes and a core were recovered from a buried A (Ab) horizon between 90 and 130 cm below surface. Only three quartz flakes were recovered from the plowzone of that shovel test pit. Shovel Test Pit 3 contained 3 quartz flakes in the plowzone with 9 quartz flakes recovered from 60 to 75 cm below surface. Shovel Test Pit 4 contained no artifacts in the plowzone, but one quartz flake was recovered from an A2 horizon 62 to 72 cm below surface, and 3 quartz flakes in a lower buried A (Ab) 82 to 92 cm below surface. No soil change had occurred at 92 cm below surface and it is assumed that the deposit may go deeper, as evidenced by the depth of a buried A containing artifacts excavated in Shovel Test Pit 2. It is also likely that the buried A containing artifacts that is present in Shovel Test Pits 2 and 4 is also present in Shovel Test Pit 3. Shovel Test Pit 11 contained 5 quartz flakes and a quartzite hammerstone in what is probably the same buried A horizon 73 to 92 cm below surface. A buried A encountered in Shovel Test Pit 12 contained a quartzite hammerstone between 44 and 50 cm below surface. No buried A was present in Shovel Test Pits 1, 5, 9, and 10, but these shovel test pits did contain argillic B horizons. Shovel Test Pit 1 contained no artifacts. Shovel Test Pit 5 contained the mid-section fragment of a quartz preform stage biface in an A2/E horizon 35 to 50 cm below surface, and a quartz primary flake from the B1 horizon 50 to 62 cm below surface. Otherwise all of the artifacts recovered from Shovel Test Pits 5, 9, and 10 were confined to the Ap or Apb. All of these shovel test pits were excavated to at least 90 cm below surface.

A fourth peak in sub-plowzone artifact distribution - defined as Cluster 4 (Figure 15) - occurs on the upper terrace associated with Shovel Test Pits 31, 45, and 46. Cluster 4 is located on the terrace overlooking the floodplain of Shallow Run. Shovel Test Pits 22, 32, 47, and 57 to the north and west were sterile. Shovel test pits to the east contained no prehistoric artifacts below the plowzone. Most of the artifacts recovered from Shovel Test Pits 31 and 46 were located within the plowzone. No prehistoric artifacts were recovered from the plowzone of Shovel Test Pit 45. Sub-plowzone artifacts contained in Shovel Test Pit 31 consist of 1 quartz flake from a buried A (Ab) 30 to 40 cm below surface, and 2 quartz flakes and a possible hammerstone from a series of C horizons between 52 and 75 cm below surface. Shovel Test Pit 45 contained only one rhyolite flake and 1 quartz flake in the buried A between 47 and 59 cm below surface. Shovel Test Pit 46 contained 5 quartz flakes in the buried A between 42 and 60 cm below surface.

It is likely that the deposits associated with the buried A in this area of the site have been substantially disturbed by plowing. However, the lower deposits associated with the C horizons in Shovel Test Pit 31 are vertically separated from the plow disturbed soils and buried A by approximately 10 cm.

All of the remaining shovel test pits on the eastward extension of the terrace, east and south of Shovel Test Pit 45, contained no prehistoric artifacts below the plowzone. As was apparent with plowzone deposits west of Shovel Test Pit 45, artifact density was very low with an average of one to three prehistoric artifacts per shovel test pit. A small concentration of artifacts with densities in the six to nine artifact range is present in Shovel Test Pits 79 - 81, but all of the artifacts were recovered from a plowzone context.

Preliminary analysis of the artifacts indicate a quarry/workshop focus at the site as suggested by the high ratio of decortication flakes to non-decortication flakes, and low percentage of tools in the overall assemblage. Evidence of bipolar and bifacial reduction is present within the overall assemblage, though attributes were not systematically recorded during the laboratory analysis. Vertical and horizontal component separation is suggested by the distribution patterns of the artifacts, but minimal data was obtained to allow discussion of functionally or chronologically discrete units. Based on the results of the limited testing, the prehistoric component of Site 18H0203 has demonstrated a high degree of integrity and research value. It is considered potentially significant for important information it may contain and should be evaluated for eligibility to the National Register of Historic Places.

Two-hundred-seventy-eight historic artifacts were recovered from 34 of the 90 shovel test pits excavated at Site 18H0203. The majority of the historic artifacts are clustered in the vicinity of the existing brick and frame structures, and outbuildings, in the eastern half of the project area. However, six of the shovel test pits at the western project area terminus contained a few scattered historic artifacts consisting of coal and cinders (n=4), oyster shell (n=5), very small brick fragments and spalls (n=5), whiteware (n=1), transfer printed pearlware spalls that are burned (n=2), colorless modern container glass (n=1), and a single wrought nail. All of the historic artifacts recovered in the western portion of the project were confined to the plowzone. They may represent field scatter related to the occupation of a historic map indicated structure located south and west of the project area, outside of the area of effect. That structure is indicated on Figures 3 - 5 as structure 3.

The remaining 28 shovel test pits containing 259 historic artifacts are located in the eastern half of the project area south of Shallow Run, in the vicinity of a modern brick residence

constructed by Mr. William Schultz (Figure 12). All of the artifacts were recovered from a plowzone or disturbed context. They date for the most part to the 19th and 20th centuries. The location of the historic artifact cluster coincides with a historic map indicated structure depicted on Figures 3 - 5 as Structure 1.

Forty-two percent of the historic artifacts in the eastern portion of the project area is represented by architectural items that consist of small brick fragments and spalls (n=41), window glass (n=16), heavily oxidized and otherwise unidentifiable nails and nail fragments (n=35), wrought nails (n=1), cut nails and fragments (n=4), wire nails (n=4), one ferrous spike, modern glazed tile (n=1), terra cotta sewer tile (n=5), and a modern light bulb fragment (n=1). Food storage and household bottle and jar fragments (n=43), ceramics (n=43), oyster shell (n=9) and unidentifiable bone fragments (n=6) represent subsistence related artifacts, and comprise thirty-nine percent of the assemblage. One brass button, a brass harness buckle, two pipe stem fragments, and a steel wire brush fragment comprise the entire personal or activity category of artifacts (2%) in the collection. Remaining artifacts (17%) consist of coal and cinders (n=35) and unidentifiable copper alloy (n=7), ferrous (n=1), and zinc (n=1) metal fragments.

The majority of the recovered glass specimens consist of modern bottle and jar fragments that are colorless (n=21), opaque white (n=2), pale green-tinted (n=4), or brown (n=7). Several colored bottle glass fragments were recovered that do not retain clearly definable, chronologically diagnostic attributes. However, based on color and glass texture, they may date before the first quarter of the twentieth century. All represent otherwise unidentifiable portions of bottles and include pale blue (n=2), pale olive (n=1), dark olive (n=2), light green (n=1), dark green (n=1), and amber (n=1) specimens. One pale green-tinted, full-size contact mold-blown bottle fragment with slug plate letter embossing was recovered and can be loosely dated between 1850 and 1915 based on the manner in which the letter embossing was applied.

The majority of the ceramic assemblage is classified as table wares based solely on ware type. Recovered specimens include: creamware (n=3); "Jackfield-like" refined red earthenware (n=1); blue shell edge-decorated pearlware (n=1); edge-embossed, otherwise unidentifiable pearlware (n=1); polychrome hand-painted pearlware (n=1); and pearlware spalls (n=7), body sherds (n=2) and rim (n=1) without decoration; blue edge-decorated whiteware (n=1); and whiteware spalls (n=4), body sherds (n=4), rims (n=2), and basal sherds (n=1) without decoration; two hard-paste porcelain sherds that are too fragmentary to be temporally or functionally diagnostic; and three otherwise unidentifiable refined white earthenware spalls. None of these refined wares represented in the assemblage contain specimens complete enough to identify vessel shape or form. Coarse wares associated with food storage and

preparation activities consist of coarse red earthenware (n=5), unglazed terra-cotta that may or may not be associated with subsistence activities (n=2), yellow ware (n=1), and salt-glazed, American blue/grey stoneware (n=1). None of the coarse ware specimens are decorated and none is complete enough to define form or vessel shape.

Brick fragments, nails, and window glass were distributed across the site area with no obvious patterning in their density and distribution. Unfortunately, the vast majority of nails are too oxidized and fragmentary to be temporally diagnostic. Diagnostic specimens include only 1 wrought nail, 4 cut nails, 4 wire nails, and an otherwise unidentifiable spike. Brick in the assemblage is of low density and is unremarkable except that nine of the recovered specimens had been burned. Burned coarse red earthenware and oyster shell was recovered in the same general vicinity, near an area used for modern trash burning and refuse disposal.

Though middle to late 18th century refined red earthenware and creamware is represented in very minor quantities in the assemblage, the majority of the ceramics recovered date from the late 18th through the 19th centuries. Glass artifacts date primarily to the 20th century with minor representation of specimens tentatively interpreted to have been manufactured prior to the 20th century. All of the historic artifacts recovered in the eastern portion of the project area are very fragmentary, and no patterns in their density or distribution may be discerned. All of the artifacts were recovered from a plowzone context. It is likely that the archeological deposit located in this area of Site 18H0203 represents the remains of a structure and domestic occupation of the early 19th through early 20th centuries. No evidence of commercial or industrial use was recovered despite the location of the historic map indicated "Old Paper Mill" in the vicinity. It is apparent that construction of the existing modern brick and frame structures has impacted the site and compromised the integrity of the historic archeological deposits. There is very little likelihood that deposits with potential integrity would remain in front of the existing structures given the grading and filling that was undertaken during construction of Mr. Schultz's residence. It is possible that the "Old Paper Mill" is located closer to the confluence of Deep and Shallow Run, west of the proposed area of effect, in an area that was not tested during this survey.

The Schultz Farm #2 Site (18H0204) (Figure 2 and Figure 12) was identified during shovel testing of the floodplain and low terrace north of Shallow Run. Five of the thirty-five shovel test pits excavated at 20 m intervals contained 18 prehistoric artifacts consisting of fire-cracked rock and quartz flaking debris. An additional 14 shovel test pits were excavated in the area of the prehistoric finds at 10 m intervals to refine site boundaries,

investigate the nature and context of the archeological deposit, and obtain a larger sample of artifacts. Eight of the fourteen supplementary shovel test pits contained 111 additional prehistoric artifacts. The site boundary depicted on Figure 12 is defined by the presence/absence of the prehistoric artifacts recovered from all shovel test pits containing artifacts (Appendix III).

Profiles from shovel test pits (Appendix IV) parallel to Shallow Run contained numerous layers of recently deposited alluvial soil to depths of 129 cm below surface. Old point bar and stream channel deposits were generally reached between 60 cm and 100 cm below ground surface. Only Shovel Test Pits 1 and 3 contained weathered mineral horizons indicating a relatively stable geomorphological environment along this area of the floodplain. In the case of Shovel Test Pit 3, a remnant of an old terrace deposit that had not been scoured out by the meandering of the stream remained. Shovel test Pit 1 contained a buried A horizon between 45 and 70 cm below surface, but contained no artifacts. Shovel Test Pit 6, closest to Shallow Run, contained a fill horizon derived from soil wasted on site during the excavation and filling of a Howard County Sewer pipeline that runs parallel and immediately adjacent to Shallow Run. No artifacts were recovered from any of the shovel test pits on the floodplain adjacent to the stream.

Shovel test pits located north of the initial transect revealed different profiles containing weathered mineral horizons and argillic B horizons. All of the shovel test pits located north of the initial transect contained a plowzone and sometimes a second, buried plow-disturbed layer. In most cases, the plow disturbance extended into the underlying B2t horizon. In a few cases, buried A (Ab) or remnant A2/E horizons were present. However, most of the terrace and inner floodplain margins exhibited evidence that plowing had been practiced for a long period of time and disturbance penetrated deeply into the surface soil mantle.

In all, 129 artifacts consisting of Quartz decortication flakes (n=67), quartz primary flakes (n=25), quartz secondary flakes (n=10), unclassifiable quartz flakes (n=18), quartz shatter (n=3), quartz chunks (n=1), fire-cracked rock (n=4), and one quartz bipolar core were excavated from Site 18H0204. Ninety-nine of the artifacts (77% of the total assemblage), including the core, were recovered from Shovel Test Pit 40. Shovel Test Pit 25, located 10 m east of Shovel Test Pit 42, contained the second highest density with 13 (10% of the entire assemblage) recovered artifacts. Only Shovel Test Pits 40 and 25 contained fire-cracked rock. Shovel Test Pit 41, located 10 m north of Shovel Test Pit 40, contained six artifacts or 5% of the assemblage. The remaining shovel test pits contained one to three artifacts.

Only Shovel Test Pits 37 and 40 contained artifacts below the plowzone. Though Ab and/or A2/E horizons were present below the

plowzone in Shovel Test Pits 15, 20, 23, 28, 37, and 41, only Shovel test Pits 15, 37, and 41 contained artifacts, and only Shovel Test Pit 37 contained artifacts in the A2/E horizon. None were recovered from the underlying B horizon in Shovel Test Pit 37. Shovel Test Pit 40 may have exhibited a similar profile before extensive plowing penetrated into the underlying B horizon. This data is interpreted to mean that portions of the site that have the least disturbance are not those that were used most extensively during the prehistoric occupation of the site. It is also not likely, given the depth into the subsoil that the shovel test pits were excavated, that another prehistoric component related to the materials recovered from the B horizon in Shovel Test Pit 40, is present in the lower B horizon strata at site 18HO204.

Based upon the high percentage of decortication and primary flakes, the presence of a core, and absence of expediently produced tools or any tools with functional associations, it is likely that this site represents a small, short-term camp specifically focused on quarry and primary reduction activities. As such, it is expected to produce a limited range of artifacts that would not greatly increase current knowledge of prehistoric settlement, subsistence, or technology, or have important archeological features that are generally associated with occupations of longer duration and more varied resource procurement strategies. Given the shovel test pit coverage of the site within the areas with the greatest density of artifacts, it may not be likely that chronologically sensitive artifacts are present. Little integrity remains as indicated by recovery of only 10 artifacts (8% of the total assemblage) in a sub-plowzone context.

INTERPRETATIONS AND RECOMMENDATIONS

The Beehive Site

Site 18HO206 is interpreted as a quarry/workshop dating at least to the Late Archaic prehistoric sub-period as indicated by the recovery of a fragmentary Savannah River projectile point. Prehistoric artifacts were recovered over a broad area measuring approximately 4.6 acres (1.9 Ha), on a low terrace and floodplain adjacent to an unnamed tributary of Shallow Run. Phase IB investigations confirm the presence of archeological deposits in undisturbed context on the terrace and floodplain portions of the site.

Because of the limited nature of work performed during the Phase IB investigation and the lack of temporally diagnostic artifacts from the floodplain portion of the site, it is not possible at this stage of work to confirm relationships, if any, between archeological deposits recovered on the floodplain and the terrace. The buried A horizon is not present in the terrace deposits. However, if the archeological deposits on the floodplain and terrace are contemporaneous, this site may provide answers to

very important research questions regarding settlement, subsistence, and technology. Quarry sites along the Piedmont/Coastal Plain transition are common and consistently contain relatively homogenous artifact assemblages. Artifacts reflecting subsistence activities (i.e. food processing, hunting, maintenance of existing tool kits) are conspicuously absent indicating no overlap or ambiguity in the functions of quarry sites or the activities that took place. The Beehive site may offer a unique opportunity to study intra-site variability within contemporaneous workshop and living areas. Given the demonstrated integrity and research value, the Beehive Site is considered potentially significant for information it contains, and Phase II evaluation is recommended if the site cannot be avoided.

The Loudon Avenue Ruin

Site 18HO205 contains the ruin of a of a 20th century domestic structure and attendant storage buildings. The structures standing at the site do not appear on historic maps before 1957 (USGS 1974). A thin scatter of 20th century artifacts was identified in the vicinity of the structure. No archeological evidence to suggest occupation of the site prior to the 20th century was recovered. All of the artifacts recovered from the shovel testing were confined to a thin, remnant A horizon that has weathered from a plowzone. Shovel testing did not provide any evidence to suggest that the back and side yard areas of the former dwelling contained archeological deposits that could be considered potentially significant, and verified that these areas have no potential for integrity owing to the severe erosion of the surface soil mantle. Given the low research potential and lack of integrity, Site 18HO205 is not eligible for listing on the National Register of Historic Places under Criterion D (36CFR60.4), and no additional archeological research is recommended.

Schultz Farm #1

Prehistoric site 18HO203 contains several overlapping prehistoric campsites located on the floodplain and adjacent terraces south of Shallow Run. Artifacts consist primarily of quartz debitage. One Early Woodland Piscataway projectile point fragment was recovered. The site contains deeply buried archeological deposits on the floodplain within the proposed area of effect, and artifacts in a buried A (Ab) horizon on the adjacent terraces. This site has the potential to provide important information on site formation processes, and interpretation of archeological sites within a geomorphological context. Distribution of the prehistoric artifacts recovered from the limited amount of Phase IB testing indicates there is strong potential for the site to contain vertically and horizontally stratified deposits that have the ability to contribute to refinement of regional and local chronological reconstructions, and increase knowledge of settlement and subsistence patterns, and

technological adaptation. Given the demonstrated degree of integrity, and potential to provide important information, Phase II evaluation to assess the National Register Eligibility of prehistoric archeological deposits at Site 18HO203 is recommended if the site cannot be avoided.

A historic component associated with a structure that was destroyed in the first half of the 20th century is present in the southeastern portion of the Schultz Farm project area and represents the remains of a domestic occupation dated largely to the 19th and 20th centuries. Historic map evidence suggested that the structure may have been owned by the Great Falls Manufacturing Company in the late 19th century. Earlier historic maps suggest the presence of an "Old Paper Mill" in the project area vicinity in the middle 19th century, but archeological evidence cannot support any commercial or industrial association. A modern residential structure now occupies the area of the historic component. Extensive grading and filling was undertaken in the vicinity of the modern structure and has seriously compromised the integrity of the archeological deposit in that area. No evidence to suggest the presence of undisturbed historic archeological deposits within the proposed area of effect was identified during the survey. Given the demonstrated lack of integrity and low research potential, the historic component of 18HO203 is not considered potentially significant, and no additional archeological work is recommended.

Schultz Farm #2

Prehistoric Site 18HO204 is a small, moderately dense lithic scatter interpreted as a short-term camp dating to an unknown period of the prehistoric past. No chronologically diagnostic artifacts were recovered. The site is located on the inner floodplain margin and low terrace overlooking the north bank of Shallow Run. Lack of diversity in the artifact assemblage and high percentage of decortication and primary flakes suggest that activities were focused on quarrying and primary reduction of quartz cobbles obtained from nearby Shallow Run. Testing was sufficient to establish that the site retains minimal integrity, and by its nature has limited research potential. Site 18HO204 is not eligible for listing on the National Register of Historic Places under Criterion D (36CFR60.4), and no additional archeological work is recommended.

Based on the results of this Phase IB survey, we believe that the sites considered potentially significant (Site 18HO203 and Site 18HO206) may be important chiefly for what can be learned from data recovery. At this stage of work, we find no evidence to suggest these sites would warrant preservation in place. Confirmation of this opinion must await completion of Phase II investigations.

REFERENCES CITED

Ballweber, Hettie L.

- 1987 Archeological Reconnaissance of Maryland Route 100 from U.S. Route 29 to Interstate Route 95, Howard County, Maryland. Maryland Geological Survey, Division of Archeology File Report 170. Baltimore.
- 1988 Archeological Reconnaissance of Maryland Route 100 from U.S. Route 29 to Interstate Route 95, Howard County, Maryland. Maryland Geological Survey, Division of Archeology File Report 215 (Supplement). Baltimore.
- 1989 Addendum Report on the Archeological Reconnaissance of Maryland Route 100, Alternates 2, 3, and 4, from Maryland Route 3 to U.S. Route 1, Anne Arundel and Howard Counties, Maryland. Maryland Geological Survey, Division of Archeology File Report 193 (Supplement). Baltimore.

Carbone, Victor A.

- 1976 Environment and Prehistory in the Shenandoah Valley. Ph.D. dissertation, The Catholic University of America. Washington, D.C.

Conrad, Geoffrey W.

- 1976 Archeological Reconnaissance of the Baltimore-Washington International Airport and the Noise Corridors of its Runways, Anne Arundel and Howard Counties, Maryland. Maryland Geological Survey, Division of Archeology File Report 31. Baltimore.

Curry, Dennis C.

- 1977a Archeological Reconnaissance of Maryland Route 170 from Proposed Maryland Route 100 to Hammonds Ferry Road, Anne Arundel County, Maryland. Maryland Geological Survey, Division of Archeology File Report 66. Baltimore.
- 1977b Archeological Reconnaissance of Proposed Maryland Route 100 from Maryland Route 3 to Interstate 95, Howard and Anne Arundel Counties, Maryland. Maryland Geological Survey, Division of Archeology File Report 96. Baltimore.
- 1978a Archeological Reconnaissance of the Proposed Interstate 195/Baltimore-Washington International Airport Railstation, Parking Lot, and Access Road, Anne Arundel County, Maryland.. Maryland Geological Survey, Division of Archeology File Report 136. Baltimore.

Curry, Dennis C.

1978b Addendum Report on the Archeological Reconnaissance of the Baltimore Washington Parkway from the Washington D.C. Line to the Baltimore City Line, Prince Georges, Anne Arundel, and Baltimore Counties. Maryland Geological Survey, Division of Archeology File Report 113 (Supplement). Baltimore.

1979 Archeological Reconnaissance of Proposed Maryland Route 100 from Interstate 95 to U.S. Route 29, Howard County, Maryland. Maryland Geological Survey, Division of Archeology File Report 140. Baltimore.

Custer, Jay F.

1984 Delaware Prehistoric Archeology: An Ecological Approach. University of Delaware Press, Newark.

Davies, Malcolm

1972 Iron Forging and Smelting in Maryland: A relict Industry after the Civil War. Ed.D. dissertation, Columbia University. New York.

Ebright, Carol A.

1989 Archaic and Paleoindian Occupations at the Higgins Site. Paper presented at the 1989 Middle Atlantic Archeological Conference, Rehoboth Beach, Delaware.

Frye, Lori

1986 Archeological Reconnaissance of Maryland Route 100, Alternates 2, 3, 4, from Maryland Route 3 to U.S. Route 1, Anne Arundel and Howard Counties, Maryland. Maryland Geological Survey, Division of Archeology File Report 193. Baltimore.

Gardner, William M., editor

1974 The Flint Run Paleoindian Complex: A Preliminary Report, 1971-1973 Seasons. The Catholic University of America, Archeology Laboratory, Occasional Papers 1. Washington, D.C.

Gardner, William M.

1976a An Archeological Reconnaissance of Two Unnamed Creeks Tributary to Piscataway Creek, Maryland. Report submitted to the Washington Suburban Sanitary Commission.

1976b Archeological Excavations at 18PR141, 18PR142, 18PR143 Near Piscataway, Maryland. Report submitted to the Washington Suburban Sanitary Commission.

1980 The Archaic. Paper presented at the 10th Annual Middle Atlantic Archeological Conference, Dover, Delaware. 1980.

Gardner, William M.

1982 **Early and Middle Woodland in the Middle Atlantic: An Overview. In Practicing Environmental Archeology: Methods and Interpretations**, edited by Roger W. Moeller, pp. 53-86. American Indian Archeological Institute. New Haven.

1987 **Comparison of Ridge and Valley, Blue Ridge, Piedmont, and Coastal Plain Archaic Period Site Distribution: An Idealized Transect (Preliminary Model).** Journal of Middle Atlantic Archeology 3:49-80. Bethlehem, Connecticut.

Garrow Patrick H., Steve Webb, Maria Almodovar, Robin L. Johnson, Bertram S. A. Herbert, Jane Shaw, and Van Taylor

1980 **Final Report: An Archeological Survey of the Proposed Pipeline Right-of-way, Carroll, Howard, and Anne Arundel Counties, Maryland.** Report prepared for the Colonial Pipeline Company, Richmond, Virginia.

Griffith, Dennis

1795 **A Map of the State of Maryland.** Printed by J. Vallance, Philadelphia. Copy on file, Maryland State Highway Administration Archeology Group, Baltimore.

Hopkins, G.M.

1879 **Atlas of Fifteen Miles around Baltimore Including Howard County, Maryland.** Reprinted 1975 by the Howard County Bicentennial Commission.

Kavanagh, Maureen

1981 **Archeological Reconnaissance of Maryland Route 32 from the Howard County Line to Annapolis Junction, Anne Arundel County, Maryland.** Maryland Geological Survey, Division of Archeology File Report 167. Baltimore.

Kinsey, W. Fred, III

1978 **Archeological Reconnaissance and Survey along the Right-of-way for Proposed I-195 in Anne Arundel and Baltimore Counties, Maryland, from I-95 to South of Maryland 170.** Report prepared for the Maryland State Highway Administration.

Kraft, John C.

1971 **Sedimentary Facies Patterns and Geologic History of the Holocene Marine Transgression.** Geological Society of America Bulletin 82:2131-2168.

Martenet, Simon J.

1860a **Map of Howard County, Maryland.** Published by John Schofield, Baltimore.

Martenet, Simon J.

1860b **Map of Anne Arundel County Maryland and District of Columbia.** Published by Simon J. Martenet, engraved and printed by T. S. Wagner, Philadelphia.

1865 **Map of Maryland including the District of Columbia.** Published by Simon J. Martenet, lithograph by Schmidt and Trowe, Baltimore.

1885 **Map of Maryland and District of Columbia.** Published by Simon J. Martenet, lithograph by Schmidt and Trowe, Baltimore.

Matthews, Earle D., and Merl F. Hershberger

1968 **Soil Survey of Howard County, Maryland.** U.S.D.A. Soil Conservation Service. Washington:GPO.

McNamara, Joseph M.

1981 **Guidelines for Archeological Investigations in Maryland.** Maryland Historical Trust Technical Report 1.

Stearns, Richard E.

1949 **Some Indian Village Sites of the Lower Patapsco River. Proceedings of the Natural History Society of Maryland** 10. Baltimore.

United States Geological Survey

1931 **Relay 15' topographic quadrangle.** United States Geological Survey, Washington, D.C.

1974 **Relay 7.5' topographic quadrangle.** United States Geological Survey, Washington, D.C.

Wesler, Kit, Dennis J. Pogue, Alvin H. Luckenbach, Gordon J. Fine, Patricia A. Sternheimer, E. Glyn Furguson

1981 **The M/DOT Archeological Resources Survey Volume 3: Piedmont.** Maryland Historical Trust Manuscript Series 6.

APPENDIX I

Glossary

Archaic Period: the period of prehistoric occupation between 8000 and 1000 B.C., characterized by a semi-sedentary, hunting and gathering lifestyle.

archeological site: an area occupied or used long enough to leave material remains, artifacts, or features, from which human behavior may be interpreted. Single artifacts, or very small groups of artifacts are designated isolated finds or artifact scatters rather than archeological sites.

artifact: any object or implement of human origin.

erosion: the weathering away of the land surface by wind, running water, and other geological agents.

floodplain: nearly level land, consisting of stream sediments, that borders a stream, and is subject to flooding.

fluted point: a projectile point characteristic of the Paleoindian Period.

Holocene: the modern geological period postdating the end of the Pleistocene glaciation, 9000 B.C. to present.

horizon, soil: a layer of soil, approximately parallel to the surface, that has distinct characteristics produced by soil forming processes.

Paleoindian Period: cultural period at the end of the Pleistocene, dating from 10,000 to 8,000 B.C., characterized by a semi-nomadic, hunting and gathering lifestyle.

Pleistocene: period of continental glaciation, which ended about 9000 B.C.

profile, soil: a vertical section of the soil through all its horizons and extending into the parent material.

shovel test pit: archeological excavation unit measuring 50 cm (20 inches) in diameter.

terrace: an old alluvial plain, originally flat or undulating, bordering a river, lake, or the sea. Stream terraces are often called second bottoms, as contrasted to floodplains, and are seldom subject to overflow.

Woodland Period: cultural period dating from 100 B.C. to A.D. 1600, characterized by the use of ceramic vessels and increasing sedentism.

APPENDIX II
Qualifications of the Investigators

Ira C. Beckerman, Principal Investigator

Ph.D. in Anthropology, Penn State University, University Park, Pennsylvania. Twenty years of archeological experience in the Middle Atlantic, Southeast, and Mesoamerica.

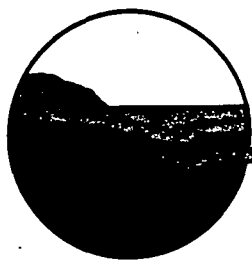
Mary F. Barse, Supervisory Archeologist

B.A. in Anthropology, The Catholic University of America, Washington, D.C. Over Fifteen years professional experience in archeology.

Appendix III

Maryland Archeological Site Survey Forms and Artifact Inventories

MARYLAND ARCHEOLOGICAL SITE SURVEY: BASIC DATA FORM



Maryland Department of Natural Resources
Division of Archeology

Maryland Geological Survey

2300 St. Paul Street
Baltimore, Maryland 21218

Site Number 18 H0203

(Shaded areas are for Division of Archeology use only)

A. Designation

1. County: Howard
2. Site Number: 18H0203
3. Site Name: Shultz Farm #1
4. Site Type (check all applicable):
☒ Prehistoric
☒ Historic
☐ Unknown
5. Maryland Archeological Research Unit Number: 7

B. Location

6. USGS 7.5' Quad-range(s): Relay (1974)
(Photocopy section of quad(s) on page 4 and mark site location)

7. UTM Coordinates at Center of Site Zone: _____

8. Easting: _____

9. Northing: _____

10. Physiographic Province (check one):

- | | |
|--|---|
| <input type="checkbox"/> Allegheny Plateau | <input type="checkbox"/> Lancaster/Frederick Lowland |
| <input type="checkbox"/> Ridge and Valley | <input type="checkbox"/> Eastern Piedmont |
| <input type="checkbox"/> Great Valley | <input checked="" type="checkbox"/> Western Shore Coastal Plain |
| <input type="checkbox"/> Blue Ridge | <input type="checkbox"/> Eastern Shore Coastal Plain |

11. Nearest Water Source: Shallow Run Order

12. 2nd Nearest Water Source: Deep Run Order

13. 3rd Nearest Water Source: Patapsco River Order

14. 4th Nearest Water Source: _____ Order

BASIC DATA FORM

C. Environmental Data

15. Closest Surface Water Type (check all applicable):

- | | |
|--|---|
| <input type="checkbox"/> Ocean | <input checked="" type="checkbox"/> Freshwater Stream/River |
| <input type="checkbox"/> Estuarine Bay/Tidal River | <input type="checkbox"/> Freshwater Swamp |
| <input type="checkbox"/> Tidal or Marsh | <input type="checkbox"/> Lake or Pond |
| | <input type="checkbox"/> Spring |

16. Distance from closest surface water:

0 meters (or 0 feet)17. SCS Typology: Cs, BeB2, BeC3

18. Topographic Settings (check all applicable):

- | | |
|--|---|
| <input checked="" type="checkbox"/> Floodplain | <input type="checkbox"/> Hilltop/Bluff |
| <input type="checkbox"/> Interior Flat | <input type="checkbox"/> Upland Flat |
| <input checked="" type="checkbox"/> Terrace | <input type="checkbox"/> Ridgetop |
| <input type="checkbox"/> Low Terrace | <input type="checkbox"/> Rockshelter/Cave |
| <input type="checkbox"/> High Terrace | <input type="checkbox"/> Unknown |
| <input type="checkbox"/> Hillslope | <input type="checkbox"/> Other: |

19. Slope: 1-10%20. Elevation: 15 meters (or 50 feet) above sea level

21. Land use at site when last field checked:

September 1992

Date

(check all applicable)

- | | |
|---|---|
| <input type="checkbox"/> Plowed/Tilled | <input type="checkbox"/> Extractive |
| <input type="checkbox"/> No-Till | <input type="checkbox"/> Military |
| <input type="checkbox"/> Wooded/Forested | <input type="checkbox"/> Recreational |
| <input type="checkbox"/> Logging/Logged | <input type="checkbox"/> Residential |
| <input type="checkbox"/> Underbrush/Overgrown | <input type="checkbox"/> Ruin |
| <input checked="" type="checkbox"/> Pasture | <input type="checkbox"/> Standing Structure |
| <input type="checkbox"/> Cemetery | <input type="checkbox"/> Transportation |
| <input type="checkbox"/> Commercial | <input type="checkbox"/> Unknown |
| <input type="checkbox"/> Educational | <input type="checkbox"/> Other: |

22. Condition of Site (check all applicable):

September 1992

Date

☐ UNDISTURBED

DESTROYED

☐ UNKNOWN☒ DISTURBED☐ Plowed☐ minor (0-10%)☐ Eroded☐ moderate (10-60%)☐ Graded/Contoured☐ major (60-99%)☐ Collected☐ total (100%)☐ Vandalized☐ % unknown☐ Dredged☐ Other:

23. Additional Comments on Environment:

D. Description

24. Site Type A (check all applicable):

PREHISTORIC

☒ Lithics
☐ Ceramics
☐ Shell Midden
☐ Unknown
☐ Other:

HISTORIC

☐ Cemetery
☐ Domestic:
 ☐ urban
 ☒ rural
☐ Educational
☐ Industrial:
 ☐ urban
 ☐ rural
☐ Military
☐ Religious
☐ Water Transportation
☐ Unknown
☐ Other:

☐ UNKNOWN

25. Site Type B (check one):

☒ Terrestrial

☐ Underwater

☐ Both

26. Cultural Affiliation (check all applicable):

PREHISTORIC

☐ Unknown

☐ Paleoindian
☐ Archaic
☐ Early Archaic
☐ Middle Archaic
☐ Late Archaic
☐ Woodland
☒ Early Woodland
☐ Middle Woodland
☐ Late Woodland

HISTORIC

☐ Unknown

17th century
 ☐ 1630-1675
 ☐ 1675-1720
18th century
 ☐ 1720-1780
 ☐ 1780-1820
19th century
 ☒ 1820-1860
 ☒ 1860-1900
20th century
 ☒ 1900-1930
 ☐ post 1930

☐ UNKNOWN

☐ CONTACT

27. State Plan
Themes: _____

28. Site length: 400 meters (or 1300 feet)

29. Site width: 160 meters (or 525 feet)

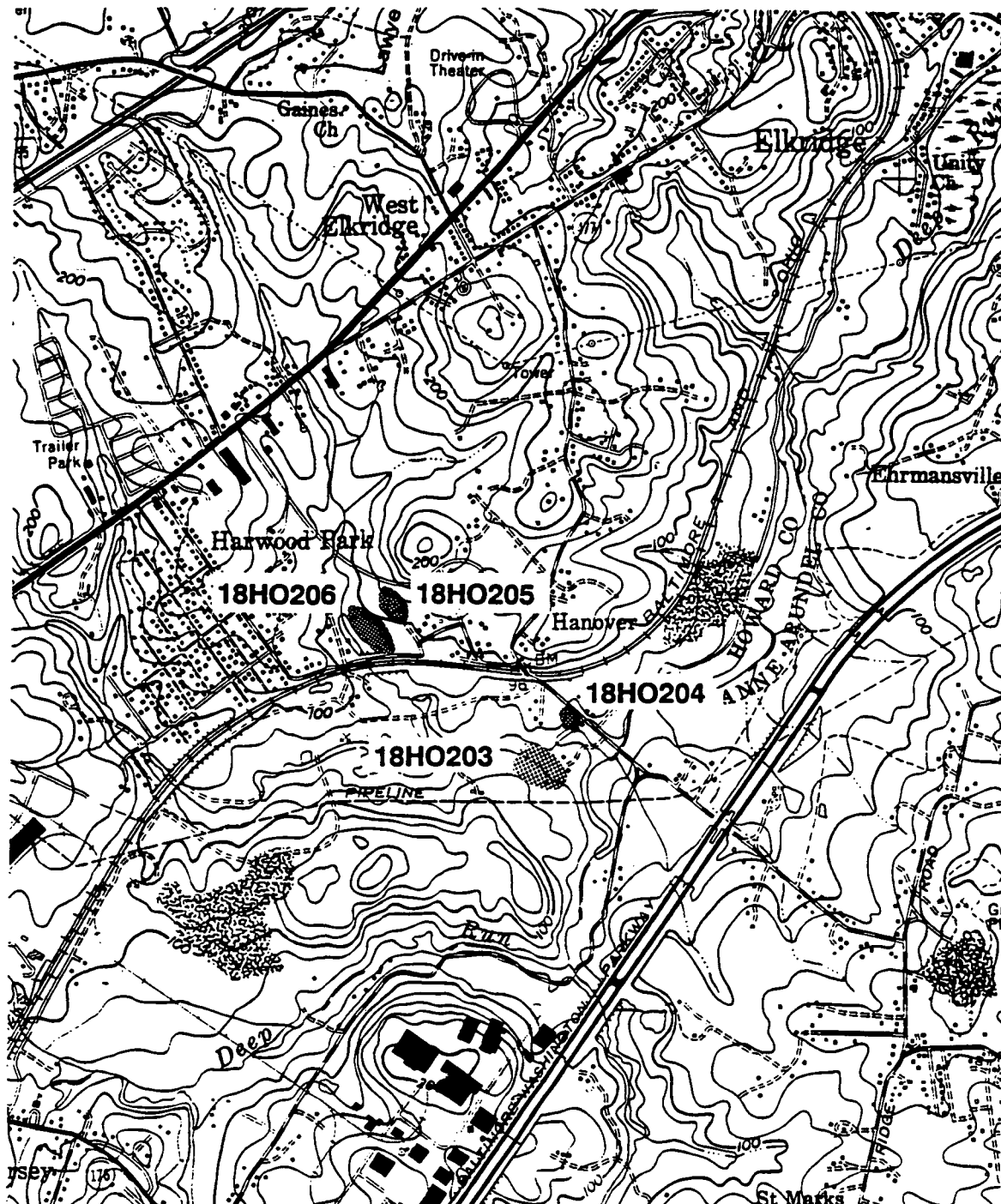
30. Is site confined to plowzone?

☐ Yes
☒ No
☐ Unknown

31. Does site have subsurface integrity?

☒ Yes
☐ No
☐ Unknown

Photocopy section of quadrangle map(s) and mark site location with heavy dot or circle and arrow.



0 miles 1
0 kilometers 1



E. Support Data (Use additional sheets if needed)

32. Accompanying Data Form(s):

☒ Prehistoric
☒ Historic
☐ Submerged
☐ Shipwreck

33. Ownership:

☒ Private
☐ Public
☐ Unknown

34. Owner: Mr. and Mrs. William Shultz
 Address: 6566 Hanover Road
 Phone: Elkridge, MD 796-1821 Date: 9/29/92

35. Tenant:
 Address:
 Phone: Date:

36. Known Investigations: Barse 1992 Phase IB Survey for MD 100 Wetland Mitigation

37. Reports (Author & year): Barse (1993)

38. Other Records?
☒ Yes
☐ No
☐ Unknown

39. If YES, type and location: Field notes, photographs, maps temporarily located with MD State Highway Administration, Archeology Group. To be permanently curated by the Maryland Historical Trust.

40. Collections?
☒ Yes
☐ No
☐ Unknown

41. If YES, give owner and location: To be permanently curated by the Maryland Historical Trust.

42. Artifact Conservation?
☐ Yes
☐ Partial
☐ No
☒ Unknown

43. Maryland Register Status:

- ☐ Listed on register
- ☐ Nomination pending
- ☐ Determined eligible (formal)
- ☐ Considered eligible (consensus)
- ☐ Not eligible
- ☐ Insufficient data

44. National Register Status:

- ☐ Listed on register
- ☐ Nomination pending
- ☐ Determined eligible (formal)
- ☐ Considered eligible (consensus)
- ☐ Not eligible
- ☐ Insufficient data

45. Informant:

Address: _____
Phone: _____

Date: _____

46. Site visited

by: Mary F. Barse - SHA Archeology Group
Address: 2323 W. Joppa Road
Phone: Brooklandville, MD 21022

Date: September 1992

47. Form filled

out by: Mary F. Barse - SHA Archeology Group
Address: 2323 W. Joppa Road
Phone: Brooklandville, MD 21022

Date: March 1993

48. Additional Comments: Phase II evaluation of this site was recommended by Barse (1993).

F. For Division of Archeology Use Only

49. Form transcribed

by: _____

50. Date: _____

51. Form

checked by: _____

52. Entered on

computer by: _____

53. Date: _____

54. Form

updated by: _____

55. Date: _____

MARYLAND ARCHEOLOGICAL SITE SURVEY: PREHISTORIC DATA FORM

Site Number 18 H0203

(Shaded areas are for Division of Archeology use only)

1. Site type (check all applicable):

☐ village
☐ hamlet
☐ base camp
☒ short-term resource procurement
☒ lithic quarry/extraction
☐ rockshelter/cave
☐ cairn

☐ earthen mound
☐ shell midden
☐ fish weir
☐ submerged prehistoric
☐ lithic scatter
☐ unknown
☐ other:

2. Categories of aboriginal material or remains present at site (check all applicable):

☒ flaked stone
☐ ground stone
☐ stone bowls
☒ fire-cracked rock
☒ other lithics
☐ ceramics (vessels)
☐ other fired clay

☐ human skeletal remains
☐ faunal implements/ornaments
☐ faunal material
☐ oyster shell
☐ floral material
☐ unknown
☐ other:

3. Lithic materials (check all applicable):

☐ jasper
☐ chert
☐ rhyolite
☒ quartz
☒ quartzite
☐ chalcedony
☐ ironstone
☐ argillite

☐ steatite
☐ sandstone
☐ silicified sandstone
☐ ferruginous quartzite
☐ European flint
☐ basalt
☐ unknown
☐ other:

4. Diagnostics (choose from manual and give number recovered or observed):

Piscataway Projectile Point (1)

5. Features present:

☐ yes
☐ no
☒ unknown

6. Types of features identified (check all applicable):

☐ midden
☐ postmolds
☐ house patterns
☐ palisade
☐ hearths
☐ chipping clusters

☐ refuse/storage pits
☐ burials
☐ ossuaries
☐ unknown
☐ other:

PREHISTORIC DATA FORM

7. Method of sampling (check all applicable):

- ☐ non-systematic surface search
☐ systematic surface collection
☐ non-systematic shovel test pits
☒ systematic shovel test pits
☐ excavation units
☐ mechanical excavation
☐ other:

extent/nature of excavation: 90 shovel test pits (50 cm in diameter) excavated on a 20 m grid within the site area. Excavated by stratigraphic and arbitrary (10 cm) levels. All soil screened through 1/4" mesh.

8. Flotation samples collected:

- ☐ yes
☒ no
☐ unknown

analyzed:

- ☐ yes, by _____
☐ no
☐ unknown

9. Samples for radiocarbon dating collected:

- ☐ yes
☒ no
☐ unknown

Dates and Lab Reference Nos. _____

10. Soil samples collected:

- ☐ yes
☒ no
☐ unknown

analyzed:

- ☐ yes, by _____
☐ no
☐ unknown

11. Other analyses (specify): _____

12. Additional comments:

13. Form filled out by: M. Barse - SHA Archeology Group
 Address/Affiliation: 2323 W. Joppa Rd. Brooklandville, MD 21022
 Date: 3-30-93

For Division of Archeology Use Only

- | | |
|-----------------------------------|-----------------|
| 14. Form transcribed by: _____ | 15. Date: _____ |
| 16. Form checked by: _____ | 18. Date: _____ |
| 17. Entered on computer by: _____ | 20. Date: _____ |
| 19. Form updated by: _____ | |

MARYLAND ARCHEOLOGICAL SITE SURVEY: HISTORIC DATA FORM

Site Number 18 H0203

(Shaded areas are for Division of Archeology use only)

1. Site Class (check all applicable, check at least one from each group):

- a. ☒ domestic
☐ industrial
☐ transportation
☐ military
☐ sepulchre
☐ unknown

- b. ☐ urban
☒ rural
☐ unknown

c. standing structure:

- ☐ yes
☒ no
☐ unknown

d. above-grade/visible ruin:

- ☐ yes
☒ no
☐ unknown

2. Site Type (check all applicable):

- ☒ artifact concentration
☐ possible structure
☐ post-in-ground structure
☐ frame structure
☐ masonry structure
☐ farmstead
☐ plantation
☐ townsite
☐ mill (specify: _____)
☐ raceway
☐ quarry
☐ furnace/forge

_____ other industrial (specify):

- _____ road/railroad
 _____ wharf/landing
 _____ bridge
 _____ ford
 _____ battlefield
 _____ military fortification
 _____ military encampment
 _____ cemetery
 _____ unknown
 _____ other:

3. Ethnic Association:

- ☐ Native American
☐ Afroamerican
☐ Angloamerican
☐ other Euroamerican
 (specify): _____

- ☐ Hispanic
☐ Asian-American
☒ unknown
☐ other:

4. Categories of material remains present (check all applicable):

- ☒ ceramics
☒ bottle/table glass
☐ other kitchen artifacts
☒ architecture
☐ furniture
☐ arms
☒ clothing
☐ personal items

- ☒ tobacco pipes
☒ activity items
☐ human skeletal remains
☒ faunal remains
☐ floral remains
☐ organic remains
☐ unknown
☐ other:

5. Diagnostics (choose from manual and give number recorded or observed):

Creamware (3)
Whiteware (12)
Bottle fragment w/ slug plate
embossing (1850-1915)

Pearlware (13)
Hard-paste porcelain (2)
Pipe stems (2)
Harness buckle (1)

Page 2
HISTORIC DATA FORM

6. Features present:

☐ yes
☒ no
☐ unknown

7. Types of features present:

☐ construction feature
☐ foundation
☐ cellar hole/storage cellar
☐ hearth/chimney base
☐ posthole/postmold
☐ paling ditch/fence
☐ privy
☐ well/cistern
☐ trash pit/dump
☐ sheet midden
☐ planting feature

☐ road/drive/walkway
☐ depression/mound
☐ burial
☐ railroad bed
☐ earthworks
☐ raceway
☐ wheel pit
☐ unknown
☐ other:

8. Method of sampling (check all applicable):

☐ non-systematic surface search
☐ systematic surface collection
☒ non-systematic shovel test pits
☐ excavation units
☐ mechanical excavation

extent/nature of excavation: 90 shovel test pits (50 cm in diameter) located on a grid at 20 m intervals. Excavated by stratigraphic and arbitrary (10 cm) levels.
All soil screen through 1/4" mesh.

9. Flotation samples collected:

☐ yes
☒ no
☐ unknown

analyzed:

☐ yes, by _____
☐ no
☐ unknown

10. Soil samples collected:

☐ yes
☒ no
☐ unknown

analyzed:

☐ yes, by _____
☐ no
☐ unknown

11. Other analyses (specify):

12. Additional Comments:

The historic component of Site 18H0203 has been disturbed by construction of a modern residence. The historic component lacks integrity, has low research potential, and is not considered potentially significant.

13. Form filled out by:

Address/Affiliation: M. Barse - SHA Archeology Group, Brooklandville, MD
Date: 3-30-93

For Division of Archeology Use Only

14. Form transcribed by:

16. Form checked by:

17. Entered on computer by:

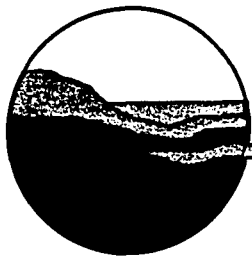
19. Form updated by:

15. Date:

18. Date:

20. Date:

MARYLAND ARCHEOLOGICAL SITE SURVEY: BASIC DATA FORM



Maryland Department of Natural Resources
Division of Archeology

Maryland Geological Survey

2300 St. Paul Street
Baltimore, Maryland 21218

Site Number 18 H0204

(Shaded areas are for Division of Archeology use only)

A. Designation

1. County: Howard
2. Site Number: 18H0204
3. Site Name: Shultz Farm #2
4. Site Type (check all applicable):
☒ Prehistoric
☐ Historic
☐ Unknown
5. Maryland Archeological Research Unit Number: 7

B. Location

6. USGS 7.5' Quad-range(s): Relay (1974)
(Photocopy section of quad(s) on page 4 and mark site location)
7. UTM Coordinates at Center of Site Zone:
8. Easting: _____
9. Northing: _____
10. Physiographic Province (check one):
☐ Allegheny Plateau
☐ Ridge and Valley
☐ Great Valley
☐ Blue Ridge
☐ Lancaster/Frederick Lowland
☐ Eastern Piedmont
☒ Western Shore Coastal Plain
☐ Eastern Shore Coastal Plain
11. Nearest Water Source: Shallow Run _____ Order
12. 2nd Nearest Water Source: Deep Run _____ Order
13. 3rd Nearest Water Source: Patapsco River _____ Order
14. 4th Nearest Water Source: _____ Order

BASIC DATA FORM

C. Environmental Data

15. Closest Surface Water Type (check all applicable):

- | | |
|---|---|
| <input type="checkbox"/> Ocean | <input checked="" type="checkbox"/> Freshwater Stream/River |
| <input type="checkbox"/> Estuarine Bay/ Tidal River | <input type="checkbox"/> Freshwater Swamp |
| <input type="checkbox"/> Tidal or Marsh | <input type="checkbox"/> Lake or Pond |
| | <input type="checkbox"/> Spring |

16. Distance from closest surface water:

30 meters (or 100 feet)

17. SCS Typology

Tub

18. Topographic Settings (check all applicable):

- | | |
|---|---|
| <input checked="" type="checkbox"/> Floodplain | <input type="checkbox"/> Hilltop/Bluff |
| <input type="checkbox"/> Interior Flat | <input type="checkbox"/> Upland Flat |
| <input type="checkbox"/> Terrace | <input type="checkbox"/> Ridgetop |
| <input checked="" type="checkbox"/> Low Terrace | <input type="checkbox"/> Rockshelter/Cave |
| <input type="checkbox"/> High Terrace | <input type="checkbox"/> Unknown |
| <input type="checkbox"/> Hillslope | <input type="checkbox"/> Other: |

19. Slope:

1-5%

20. Elevation: 15 meters (or 50 feet) above sea level21. Land use at site when last field checked:
(check all applicable)August 1992

Date

- | | |
|---|---|
| <input type="checkbox"/> Plowed/Tilled | <input type="checkbox"/> Extractive |
| <input type="checkbox"/> No-Till | <input type="checkbox"/> Military |
| <input type="checkbox"/> Wooded/Forested | <input type="checkbox"/> Recreational |
| <input type="checkbox"/> Logging/Logged | <input type="checkbox"/> Residential |
| <input type="checkbox"/> Underbrush/Overgrown | <input type="checkbox"/> Ruin |
| <input checked="" type="checkbox"/> Pasture | <input type="checkbox"/> Standing Structure |
| <input type="checkbox"/> Cemetery | <input type="checkbox"/> Transportation |
| <input type="checkbox"/> Commercial | <input type="checkbox"/> Unknown |
| <input type="checkbox"/> Educational | <input type="checkbox"/> Other: |

22. Condition of Site (check all applicable):

August 1992

Date

- | | | |
|---|--|----------------------------------|
| <input type="checkbox"/> UNDISTURBED | <input type="checkbox"/> DESTROYED | <input type="checkbox"/> UNKNOWN |
| <input checked="" type="checkbox"/> DISTURBED | <input type="checkbox"/> minor (0-10%) | |
| <input type="checkbox"/> Plowed | <input type="checkbox"/> moderate (10-60%) | |
| <input type="checkbox"/> Eroded | <input type="checkbox"/> major (60-99%) | |
| <input type="checkbox"/> Graded/Contoured | <input type="checkbox"/> total (100%) | |
| <input type="checkbox"/> Collected | <input type="checkbox"/> % unknown | |
| <input type="checkbox"/> Vandalized | | |
| <input type="checkbox"/> Dredged | | |
| <input checked="" type="checkbox"/> Other: | | |
| <u>stream migration</u> | | |

23. Additional Comments on Environment: Intervening area between site and shallow run contains flood chute and recently deposited alluvial sediments.

D. Description

24. Site Type A (check all applicable):

PREHISTORIC

- ☒ Lithics
☐ Ceramics
☐ Shell Midden
☐ Unknown
☐ Other:

HISTORIC

- ☐ Cemetery
☐ Domestic:
☐ urban
☐ rural
☐ Educational
☐ Industrial:
☐ urban
☐ rural
☐ Military
☐ Religious
☐ Water Transportation
☐ Unknown
☐ Other:

☐ UNKNOWN

25. Site Type B (check one):

☒ Terrestrial

☐ Underwater

☐ Both

26. Cultural Affiliation (check all applicable):

PREHISTORIC

- ☒ Unknown
☐ Paleoindian
☐ Archaic
☐ Early Archaic
☐ Middle Archaic
☐ Late Archaic
☐ Woodland
☐ Early Woodland
☐ Middle Woodland
☐ Late Woodland

HISTORIC

- ☐ Unknown
☐ 17th century
☐ 1630-1675
☐ 1675-1720
☐ 18th century
☐ 1720-1780
☐ 1780-1820
☐ 19th century
☐ 1820-1860
☐ 1860-1900
☐ 20th century
☐ 1900-1930
☐ post 1930

☐ UNKNOWN

☐ CONTACT

27. State Plan
Themes:

28. Site length: 91 meters (or 300 feet)

29. Site width: 67 meters (or 220 feet)

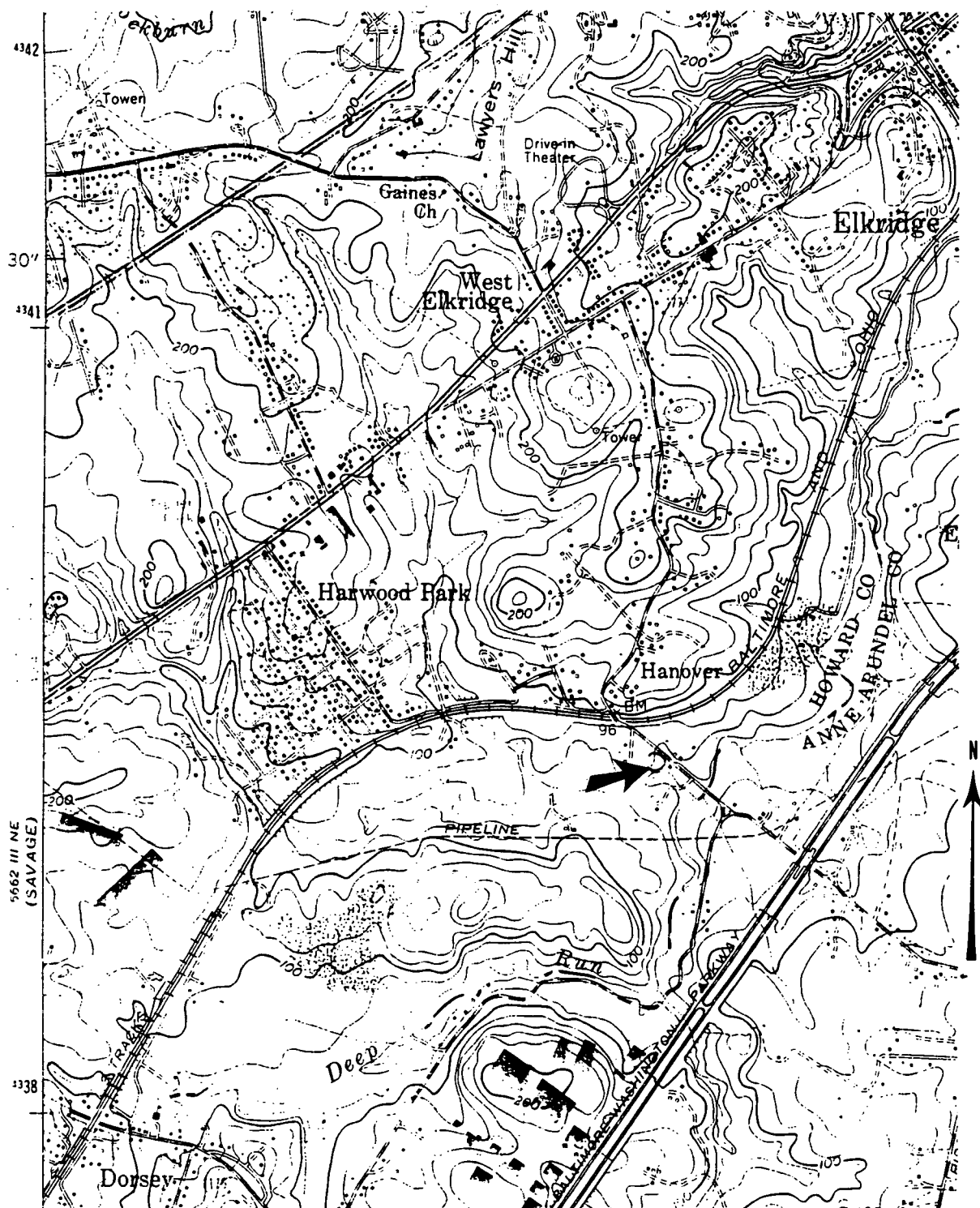
30. Is site confined to plowzone?

- ☐ Yes
☒ No
☐ Unknown

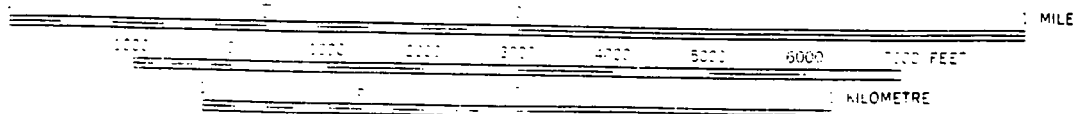
31. Does site have subsurface integrity?

- ☐ Yes
☒ No
☐ Unknown

Photocopy section of quadrangle map(s) and mark site location with heavy dot or circle and arrow.



SCALE 1:24 000



CONTOUR INTERVAL 20 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

E. Support Data (Use additional sheets if needed)

32. Accompanying Data Form(s):

☒ Prehistoric
☐ Historic
☐ Submerged
☐ Shipwreck

33. Ownership:

☒ Private
☐ Public
☐ Unknown

34. Owner: Mr. and Mrs. William Shultz
 Address: 6566 Hanover Road
 Phone: Elkridge, MD 796-1821 Date: August 1992

35. Tenant: _____
 Address: _____
 Phone: _____ Date: _____

36. Known Investigations: Barse (1992) Phase IB survey for MD 100
Wetland Mitigation

37. Reports (Author & year): Barse (1992)

38. Other Records?
☒ Yes
☐ No
☐ Unknown

39. If YES, type and location: Field notes, photographs, maps located with Maryland State Highway
Administration Archeology Group.

40. Collections?
☒ Yes
☐ No
☐ Unknown

41. If YES, give owner and location: To be permanently curated by the Maryland Historical Trust.

42. Artifact Conservation?
☐ Yes
☐ Partial
☐ No
☒ Unknown

BASIC DATA FORM**43. Maryland Register Status:**

- ☐ Listed on register
☐ Nomination pending
☐ Determined eligible (formal)
☐ Considered eligible (consensus)
☐ Not eligible
☐ Insufficient data

44. National Register Status:

- ☐ Listed on register
☐ Nomination pending
☐ Determined eligible (formal)
☐ Considered eligible (consensus)
☐ Not eligible
☐ Insufficient data

45. Informant:

Address: _____

Phone: _____

Date: _____

46. Site visited

by: _____

Mary F. Barse

Address: _____

State Highway Administration Archeology Group - 2323 W. Joppa Road

Phone: _____

(410) 321-2213Date: August 1992**47. Form filled**

out by: _____

Mary F. Barse

Address: _____

2323 W. Joppa Road, Brooklandville, MD 21022

Phone: _____

(410) 321-2213Date: August 1992**48. Additional Comments:****F. For Division of Archeology Use Only****49. Form transcribed**

by: _____

50. Date: _____

51. Form

checked by: _____

52. Entered on

computer by: _____

53. Date: _____

54. Form

updated by: _____

55. Date: _____

MARYLAND ARCHEOLOGICAL SITE SURVEY: PREHISTORIC DATA FORM

Site Number 18 H0204

(Shaded areas are for Division of Archeology use only)

1. Site type (check all applicable):

☐ village
☐ hamlet
☐ base camp
☒ short-term resource procurement
☒ lithic quarry/extraction
☐ rockshelter/cave
☐ cairn

☐ earthen mound
☐ shell midden
☐ fish weir
☐ submerged prehistoric
☐ lithic scatter
☐ unknown
☐ other:

2. Categories of aboriginal material or remains present at site (check all applicable):

☒ flaked stone
☐ ground stone
☐ stone bowls
☒ fire-cracked rock
☐ other lithics
☐ ceramics (vessels)
☐ other fired clay

☐ human skeletal remains
☐ faunal implements/ornaments
☐ faunal material
☐ oyster shell
☐ floral material
☐ unknown
☐ other:

3. Lithic materials (check all applicable):

☐ jasper
☐ chert
☐ rhyolite
☒ quartz
☐ quartzite
☐ chalcedony
☐ ironstone
☐ argillite

☐ steatite
☐ sandstone
☐ silicified sandstone
☐ ferruginous quartzite
☐ European flint
☐ basalt
☐ unknown
☐ other:

4. Diagnostics (choose from manual and give number recovered or observed):

none

5. Features present:

☐ yes
☒ no
☐ unknown

6. Types of features identified (check all applicable):

☐ midden
☐ postmolds
☐ house patterns
☐ palisade
☐ hearths
☐ chipping clusters

☐ refuse/storage pits
☐ burials
☐ ossuaries
☐ unknown
☐ other:

PREHISTORIC DATA FORM

7. Method of sampling (check all applicable):

- ☐ non-systematic surface search
☐ systematic surface collection
☐ non-systematic shovel test pits
☒ systematic shovel test pits
☐ excavation units
☐ mechanical excavation
☐ other:

extent/nature of excavation: 24 (50 cm diameter) shovel test pits excavated within site area at 10-20 meter grid intervals. Excavated in stratigraphic and arbitrary 10 cm levels. All material screened through 1/4" mesh.

8. Flotation samples collected:

- ☐ yes
☒ no
☐ unknown

analyzed:

- ☐ yes, by _____
☐ no
☐ unknown

9. Samples for radiocarbon dating collected:

- ☐ yes
☒ no
☐ unknown

Dates and Lab Reference Nos. _____

10. Soil samples collected:

- ☐ yes
☒ no
☐ unknown

analyzed:

- ☐ yes, by _____
☐ no
☐ unknown

11. Other analyses (specify): _____

12. Additional comments:

13. Form filled out by: Mary Barse

Address/Affiliation: State Highway Administration Archeology Group

Date: August 28, 1992

For Division of Archeology Use Only

14. Form transcribed by: _____

15. Date: _____

16. Form checked by: _____

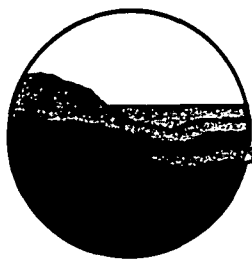
18. Date: _____

17. Entered on computer by: _____

20. Date: _____

19. Form updated by: _____

MARYLAND ARCHEOLOGICAL SITE SURVEY: BASIC DATA FORM



Maryland Department of Natural Resources
Division of Archeology

Maryland Geological Survey

2300 St. Paul Street
Baltimore, Maryland 21218

Site Number 18 HO205

(Shaded areas are for Division of Archeology use only)

A. Designation

1. County: Howard
2. Site Number: 18HO205
3. Site Name: Loudon Avenue Ruin
4. Site Type (check all applicable):
☐ Prehistoric
☒ Historic
☐ Unknown
5. Maryland Archeological Research Unit Number: 7

B. Location

6. USGS 7.5' Quad-range(s): Relay (1974)
(Photocopy section of quad(s) on page 4 and mark site location)
7. UTM Coordinates at Center of Site: _____ Zone: _____
8. Easting: _____
9. Northing: _____
10. Physiographic Province (check one):
☐ Allegheny Plateau
☐ Ridge and Valley
☐ Great Valley
☐ Blue Ridge
☐ Lancaster/Frederick Lowland
☐ Eastern Piedmont
☐ Western Shore Coastal Plain
☐ Eastern Shore Coastal Plain
11. Nearest Water Source: Unnamed Tributary _____ Order
12. 2nd Nearest Water Source: Shallow Run _____ Order
13. 3rd Nearest Water Source: Deep Run _____ Order
14. 4th Nearest Water Source: Patapsco River _____ Order

BASIC DATA FORM**C. Environmental Data**

15. Closest Surface Water Type (check all applicable):

- | | |
|--|--|
| <input type="checkbox"/> Ocean | <input type="checkbox"/> Freshwater Stream/River |
| <input type="checkbox"/> Estuarine Bay/Tidal River | <input type="checkbox"/> Freshwater Swamp |
| <input type="checkbox"/> Tidal or Marsh | <input type="checkbox"/> Lake or Pond |
| | <input checked="" type="checkbox"/> Spring |

16. Distance from closest surface water:

30 meters (or 100 feet)17. SCS Typology: ScB

18. Topographic Settings (check all applicable):

- | | |
|--|---|
| <input type="checkbox"/> Floodplain | <input type="checkbox"/> Hilltop/Bluff |
| <input type="checkbox"/> Interior Flat | <input type="checkbox"/> Upland Flat |
| <input type="checkbox"/> Terrace | <input type="checkbox"/> Ridgetop |
| <input type="checkbox"/> Low Terrace | <input type="checkbox"/> Rockshelter/Cave |
| <input checked="" type="checkbox"/> High Terrace | <input type="checkbox"/> Unknown |
| <input type="checkbox"/> Hillslope | <input type="checkbox"/> Other: |

19. Slope: 0-5%20. Elevation: 30 meters (or 100 feet) above sea level

21. Land use at site when last field checked:

August 1992

Date

(check all applicable)

- | | |
|--|--|
| <input checked="" type="checkbox"/> Plowed/Tilled | <input type="checkbox"/> Extractive |
| <input type="checkbox"/> No-Till | <input type="checkbox"/> Military |
| <input type="checkbox"/> Wooded/Forested | <input type="checkbox"/> Recreational |
| <input type="checkbox"/> Logging/Logged | <input checked="" type="checkbox"/> Residential |
| <input checked="" type="checkbox"/> Underbrush/Overgrown | <input checked="" type="checkbox"/> Ruin |
| <input type="checkbox"/> Pasture | <input checked="" type="checkbox"/> Standing Structure |
| <input type="checkbox"/> Cemetery | <input type="checkbox"/> Transportation |
| <input type="checkbox"/> Commercial | <input type="checkbox"/> Unknown |
| <input type="checkbox"/> Educational | <input type="checkbox"/> Other: |

22. Condition of Site (check all applicable):

August 1992

Date

☐ UNDISTURBED

DESTROYED

☐ UNKNOWN☒ DISTURBED☐ minor (0-10%)☒ moderate (10-60%)☐ major (60-99%)☐ total (100%)☐ % unknown☒ Plowed☒ Eroded☐ Graded/Contoured☐ Collected☐ Vandalized☐ Dredged☐ Other:

23. Additional Comments on Environment: Severely eroded in back and side yard areas. Large Commercial Structure (abandoned) has disturbed a portion of the backyard area.

D. Description

24. Site Type A (check all applicable):

PREHISTORIC

☐ Lithics
☐ Ceramics
☐ Shell Midden
☐ Unknown
☐ Other:

HISTORIC

☐ Cemetery
☐ Domestic:
☐ urban
☒ rural
☐ Educational
☐ Industrial:
☐ urban
☐ rural
☐ Military
☐ Religious
☐ Water Transportation
☐ Unknown
☐ Other:

☐ UNKNOWN

25. Site Type B (check one):

☒ Terrestrial

☐ Underwater

☐ Both

26. Cultural Affiliation (check all applicable):

PREHISTORIC

☐ Unknown

☐ Paleoindian
☐ Archaic
☐ Early Archaic
☐ Middle Archaic
☐ Late Archaic
☐ Woodland
☐ Early Woodland
☐ Middle Woodland
☐ Late Woodland

☐ CONTACT

HISTORIC

☐ Unknown

17th century
☐ 1630-1675
☐ 1675-1720
18th century
☐ 1720-1780
☐ 1780-1820
19th century
☐ 1820-1860
☐ 1860-1900
20th century
☒ 1900-1930
☐ post 1930

☐ UNKNOWN

27. State Plan
Themes: _____

28. Site length: 122 meters (or 400feet)

29. Site width: 61 meters (or 200feet)

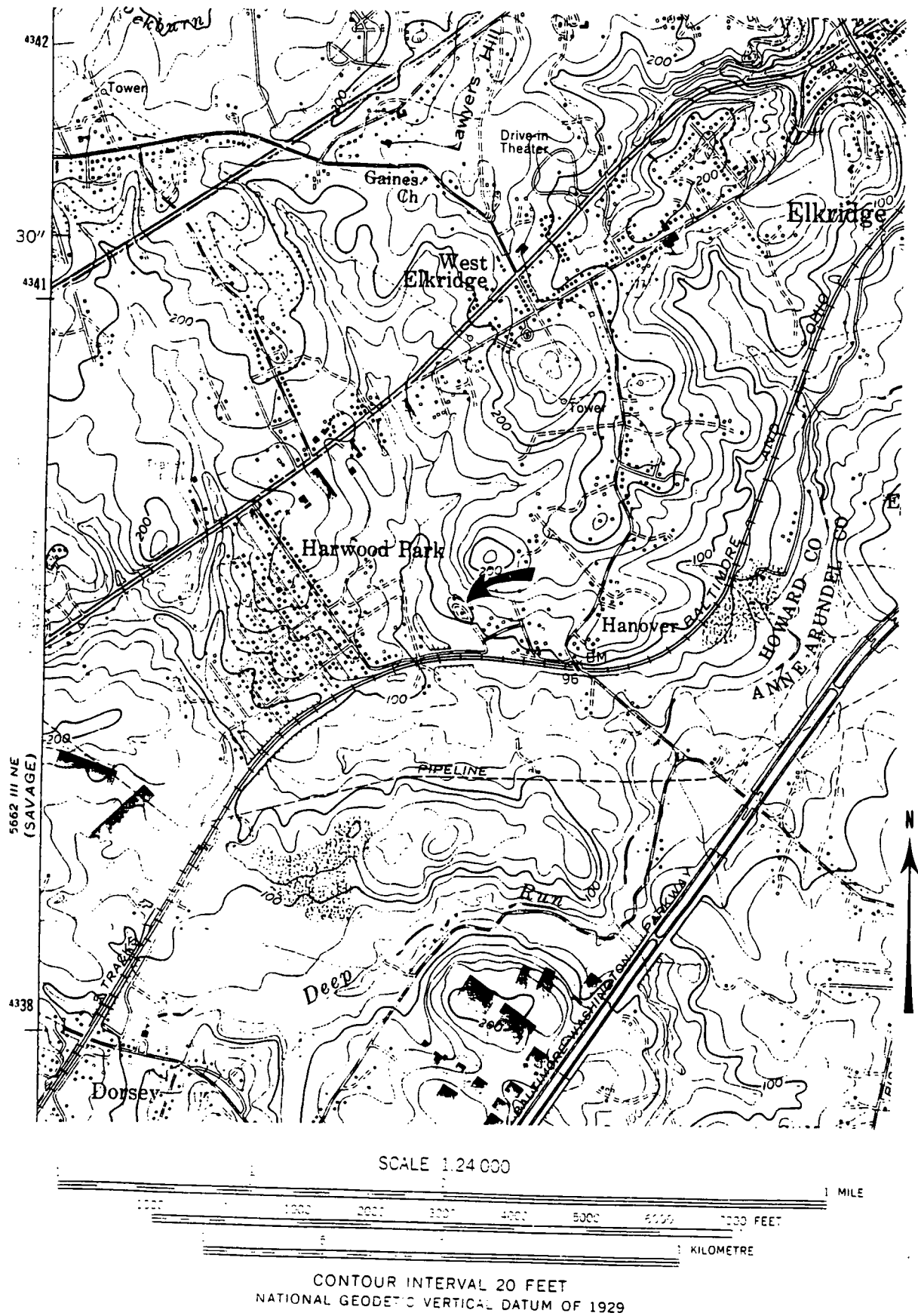
30. Is site confined to plowzone?

☒ Yes
☐ No
☐ Unknown

31. Does site have subsurface integrity?

☐ Yes
☒ No
☐ Unknown

Photocopy section of quadrangle map(s) and mark site location with heavy dot or circle and arrow.



E. Support Data (Use additional sheets if needed)

32. Accompanying Data Form(s):

☐ Prehistoric
☒ Historic
☐ Submerged
☐ Shipwreck

33. Ownership:

☐ Private
☒ Public
☐ Unknown

34. Owner: State of Maryland
Address: Department of Transportation
Phone: _____ Date: August 1992

35. Tenant: _____
Address: _____
Phone: _____ Date: _____

36. Known Investigations: Barse (1992) Phase IB survey for MD 100
Wetland Mitigation

37. Reports (Author & year): Barse (1992)

38. Other Records?

☒ Yes
☐ No
☐ Unknown

39. If YES, type and location: Field records, photographs, maps located with State Highway Administration
Archeology Group
Brooklandville, MD

40. Collections?

☒ Yes
☐ No
☐ Unknown

41. If YES, give owner and location: To be permanently curated by the Maryland Historical Trust.

42. Artifact Conservation?

☐ Yes
☐ Partial
☐ No
☒ Unknown

BASIC DATA FORM**43. Maryland Register Status:**

- ☐ Listed on register
☐ Nomination pending
☐ Determined eligible (formal)
☐ Considered eligible (consensus)
☐ Not eligible
☐ Insufficient data

44. National Register Status:

- ☐ Listed on register
☐ Nomination pending
☐ Determined eligible (formal)
☐ Considered eligible (consensus)
☐ Not eligible
☐ Insufficient data

45. Informant:

Address: _____

Phone: _____

Date: _____

46. Site visited by:

Mary F. Barse

Address: _____

2323 W. Joppa Road, Brooklandville, MD 21022

Phone: _____

(410) 321-2213

Date: August 1992

47. Form filled out by:

Mary F. Barse

Address: _____

2323 W. Joppa Road, Brooklandville, MD 21022

Phone: _____

(410) 321-2213

Date: August 1992

48. Additional Comments:**F. For Division of Archeology Use Only****49. Form transcribed**

by: _____

50. Date: _____

51. Form

checked by: _____

52. Entered on

computer by: _____

53. Date: _____

54. Form

updated by: _____

55. Date: _____

MARYLAND ARCHEOLOGICAL SITE SURVEY: HISTORIC DATA FORM

Site Number 18 H0205

(Shaded areas are for Division of Archeology use only)

1. Site Class (check all applicable, check at least one from each group):

a. ☒ domestic
☐ industrial
☐ transportation
☐ military
☐ sepulchre
☐ unknown

b. ☐ urban
☒ rural
☐ unknown

c. standing structure:

☒ yes
☐ no
☐ unknown

d. above-grade/visible ruin:

☒ yes
☐ no
☐ unknown

2. Site Type (check all applicable):

☐ artifact concentration
☐ possible structure
☐ post-in-ground structure
☒ frame structure
☐ masonry structure
☒ farmstead
☐ plantation
☐ townsite
☐ mill (specify: _____)
☐ raceway
☐ quarry
☐ furnace/forge

_____ other industrial (specify):

_____ road/railroad
_____ wharf/landing
_____ bridge
_____ ford
_____ battlefield
_____ military fortification
_____ military encampment
_____ cemetery
_____ unknown
_____ other:

3. Ethnic Association:

☐ Native American
☐ Afroamerican
☐ Angloamerican
☐ other Euroamerican
(specify): _____

_____ Hispanic
_____ Asian-American
☒ unknown
_____ other:

4. Categories of material remains present (check all applicable):

☐ ceramics
☒ bottle/table glass
☐ other kitchen artifacts
☒ architecture
☐ furniture
☐ arms
☐ clothing
☐ personal items

_____ tobacco pipes
_____ activity items
_____ human skeletal remains
_____ faunal remains
_____ floral remains
_____ organic remains
_____ unknown
_____ other:

5. Diagnostics (choose from manual and give number recorded or observed):

machine made bottle glass (4)
colorless container glass (10)
machine made tumbler (1)
window glass (32)

wire nails (12)
asphalt roofing shingle (7)
brick (15)
sewer tile (1)

Page 2
HISTORIC DATA FORM

6. Features present:

☐ yes
☐ no
☒ unknown

7. Types of features present:

☐ construction feature
☐ foundation
☐ cellar hole/storage cellar
☐ hearth/chimney base
☐ posthole/postmold
☐ palling ditch/fence
☐ privy
☐ well/cistern
☐ trash pit/dump
☐ sheet midden
☐ planting feature

☒ road/drive/walkway
☐ depression/mound
☐ burial
☐ railroad bed
☐ earthworks
☐ raceway
☐ wheel pit
☐ unknown
☐ other: _____

8. Method of sampling (check all applicable):

☒ non-systematic surface search
☐ systematic surface collection
☒ systematic shovel test pits
☐ excavation units
☐ mechanical excavation

extent/nature of excavation: Surface reconnaissance of plowed garden in rear yard;
9 shovel test pits (50 cm diameter) excavated in back and side yard areas
where little surface visibility was available.

9. Flotation samples collected:

☐ yes
☒ no
☐ unknown

analyzed:

☐ yes, by _____
☐ no
☐ unknown

10. Soil samples collected:

☐ yes
☒ no
☐ unknown

analyzed:

☐ yes, by _____
☐ no
☐ unknown

11. Other analyses (specify): _____

12. Additional Comments:

13. Form filled out by: M. Barse

Address/Affiliation: State Highway Administration Archeology Group

Date: August 28, 1992

For Division of Archeology Use Only

14. Form transcribed by: _____

15. Date: _____

16. Form checked by: _____

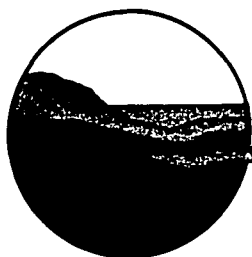
18. Date: _____

17. Entered on computer by: _____

20. Date: _____

19. Form updated by: _____

MARYLAND ARCHEOLOGICAL SITE SURVEY: BASIC DATA FORM



Maryland Department of Natural Resources
Division of Archeology

Maryland Geological Survey

2300 St. Paul Street
Baltimore, Maryland 21218

Site Number 18 HO206

(Shaded areas are for Division of Archeology use only)

A. Designation

1. County: Howard
2. Site Number: 18HO206
3. Site Name: Beehive
4. Site Type (check all applicable):
☒ Prehistoric
☐ Historic
☐ Unknown
5. Maryland Archeological Research Unit Number: 7

B. Location

6. USGS 7.5' Quad-range(s): Relay (1974)
(Photocopy section of quad(s) on page 4 and mark site location)
7. UTM Coordinates at Center of Site Zone:
8. Easting: _____
9. Northing: _____
10. Physiographic Province (check one):
☐ Allegheny Plateau
☐ Ridge and Valley
☐ Great Valley
☐ Blue Ridge
☐ Lancaster/Frederick Lowland
☐ Eastern Piedmont
☒ Western Shore Coastal Plain
☐ Eastern Shore Coastal Plain
11. Nearest Water Source: Unnamed Tributary _____ Order
12. 2nd Nearest Water Source: Shallow Run _____ Order
13. 3rd Nearest Water Source: Deep Run _____ Order
14. 4th Nearest Water Source: Patapsco River _____ Order

BASIC DATA FORM

C. Environmental Data

15. Closest Surface Water Type (check all applicable):

- | | |
|--|---|
| <input type="checkbox"/> Ocean | <input checked="" type="checkbox"/> Freshwater Stream/River |
| <input type="checkbox"/> Estuarine Bay/Tidal River | <input type="checkbox"/> Freshwater Swamp |
| <input type="checkbox"/> Tidal or Marsh | <input type="checkbox"/> Lake or Pond |
| | <input type="checkbox"/> Spring |

16. Distance from closest surface water: 0 meters (or 0 feet)17. SCS Typology: WoB2

18. Topographic Settings (check all applicable):

- | | |
|---|---|
| <input checked="" type="checkbox"/> Floodplain | <input type="checkbox"/> Hilltop/Bluff |
| <input type="checkbox"/> Interior Flat | <input type="checkbox"/> Upland Flat |
| <input type="checkbox"/> Terrace | <input type="checkbox"/> Ridgetop |
| <input checked="" type="checkbox"/> Low Terrace | <input type="checkbox"/> Rockshelter/Cave |
| <input type="checkbox"/> High Terrace | <input type="checkbox"/> Unknown |
| <input type="checkbox"/> Hillslope | <input type="checkbox"/> Other: |

19. Slope: 1-5%20. Elevation: 24 meters (or 80 feet) above sea level

21. Land use at site when last field checked:

August 1992

Date

(check all applicable)

- | | |
|--|---|
| <input type="checkbox"/> Plowed/Tilled | <input type="checkbox"/> Extractive |
| <input type="checkbox"/> No-Till | <input type="checkbox"/> Military |
| <input type="checkbox"/> Wooded/Forested | <input type="checkbox"/> Recreational |
| <input type="checkbox"/> Logging/Logged | <input type="checkbox"/> Residential |
| <input checked="" type="checkbox"/> Underbrush/Overgrown | <input type="checkbox"/> Ruin |
| <input type="checkbox"/> Pasture | <input type="checkbox"/> Standing Structure |
| <input type="checkbox"/> Cemetery | <input type="checkbox"/> Transportation |
| <input type="checkbox"/> Commercial | <input type="checkbox"/> Unknown |
| <input type="checkbox"/> Educational | <input type="checkbox"/> Other: |

22. Condition of Site (check all applicable):

August 1992

Date

☐ UNDISTURBED

DESTROYED

☐ UNKNOWN☒ DISTURBED☐ Plowed☐ minor (0-10%)☐ Eroded☐ moderate (10-60%)☐ Graded/Contoured☐ major (60-99%)☐ Collected☐ total (100%)☐ Vandalized☐ % unknown☐ Dredged☐ Other:

23. Additional Comments on Environment:

D. Description

24. Site Type A (check all applicable):

PREHISTORIC

- ☒ Lithics
☐ Ceramics
☐ Shell Midden
☐ Unknown
☐ Other:

HISTORIC

- ☐ Cemetery
☐ Domestic:
☐ urban
☐ rural
☐ Educational
☐ Industrial:
☐ urban
☐ rural
☐ Military
☐ Religious
☐ Water Transportation
☐ Unknown
☐ Other:

☐ UNKNOWN

25. Site Type B (check one):

☒ Terrestrial

☐ Underwater

☐ Both

26. Cultural Affiliation (check all applicable):

PREHISTORIC

- ☒ Unknown
☐ Paleoindian
☐ Archaic
☐ Early Archaic
☐ Middle Archaic
☒ Late Archaic
☐ Woodland
☐ Early Woodland
☐ Middle Woodland
☐ Late Woodland

HISTORIC

- ☐ Unknown
☐ 17th century
☐ 1630-1675
☐ 1675-1720
☐ 18th century
☐ 1720-1780
☐ 1780-1820
☐ 19th century
☐ 1820-1860
☐ 1860-1900
☐ 20th century
☐ 1900-1930
☐ post 1930

☐ UNKNOWN

☐ CONTACT

27. State Plan
Themes:

28. Site length: 213 meters (or 700 feet)

29. Site width: 91 meters (or 300 feet)

30. Is site confined to plowzone?

- ☐ Yes
☒ No
☐ Unknown

31. Does site have subsurface integrity?

- ☒ Yes
☐ No
☐ Unknown

Topographic map of the Harwood Park area in Baltimore, Maryland. The map shows contour lines, roads, and landmarks. A large black arrow points to a specific location near Harwood Park and the Baltimore Harbor Tunnel. The map includes labels for 'Harwood Park', 'West Elkrige', 'Gaines Ch', 'Lawyers Hill', 'Drive-In Theater', 'Elkrige', 'Hanover', 'Baltimore', 'Howard Co', 'Anne Arundel Co', 'Deep', 'Dorsey', and 'Pipeline'. The map is oriented with North at the top.

A horizontal graphic scale bar. The top scale is in miles, with markings at 0, 100, 200, 300, 400, 500, 600, and 700. The bottom scale is in kilometers, with markings at 0, 100, 200, 300, 400, 500, 600, and 700. The text 'KILOMETRE' is printed below the bottom scale. The word 'MILE' is printed at the far right end of the top scale.

83

E. Support Data (Use additional sheets if needed)

32. Accompanying Data Form(s):

- ☒ Prehistoric
☐ Historic
☐ Submerged
☐ Shipwreck

33. Ownership:

- ☐ Private
☒ Public
☐ Unknown

34. Owner: State of Maryland
 Address: Department of Transportation
 Phone: _____ Date: July 1992

35. Tenant: _____
 Address: _____
 Phone: _____ Date: _____

36. Known Investigations: Barse (1992) Phase IB survey for MD 100
Wetland Mitigation

37. Reports (Author & year): Barse (1992)

38. Other Records?

- ☒ Yes
☐ No
☐ Unknown

39. If YES, type and location: Field records, photographs, maps located with Highway Archeology Group
Brooklandville, Maryland 21022

40. Collections?

- ☒ Yes
☐ No
☐ Unknown

41. If YES, give owner and location: To be permanently curated by the Maryland Historical Trust.

42. Artifact Conservation?

- ☐ Yes
☐ Partial
☐ No
☒ Unknown

43. Maryland Register Status:

- ☐ Listed on register
- ☐ Nomination pending
- ☐ Determined eligible (formal)
- ☐ Considered eligible (consensus)
- ☐ Not eligible
- ☐ Insufficient data

44. National Register Status:

- ☐ Listed on register
- ☐ Nomination pending
- ☐ Determined eligible (formal)
- ☐ Considered eligible (consensus)
- ☐ Not eligible
- ☐ Insufficient data

45. Informant:

Address: _____
Phone: _____ Date: _____

46. Site visited
by:

Mary F. Barse

Address: State Highway Administration
Phone: Archeology Group 321-2213 Date: August 1992

47. Form filled
out by:

Mary F. Barse

Address: State Highway Administration
Phone: Archeology Group 410/321-2213 Date: August 1992

48. Additional Comments:

F. For Division of Archeology Use Only

49. Form transcribed
by:

50. Date: _____

51. Form

checked by:

52. Entered on

computer by:

53. Date: _____

54. Form

updated by:

55. Date: _____

MARYLAND ARCHEOLOGICAL SITE SURVEY: PREHISTORIC DATA FORM

Site Number 18 H0206

(Shaded areas are for Division of Archeology use only)

1. Site type (check all applicable):

☐ village
☐ hamlet
☐ base camp
☒ short-term resource procurement
☒ lithic quarry/extraction
☐ rockshelter/cave
☐ cairn

☐ earthen mound
☐ shell midden
☐ fish weir
☐ submerged prehistoric
☐ lithic scatter
☐ unknown
☐ other:

2. Categories of aboriginal material or remains present at site (check all applicable):

☒ flaked stone
☐ ground stone
☐ stone bowls
☒ fire-cracked rock
☐ other lithics
☐ ceramics (vessels)
☐ other fired clay

☐ human skeletal remains
☐ faunal implements/ornaments
☐ faunal material
☐ oyster shell
☐ floral material
☐ unknown
☐ other:

3. Lithic materials (check all applicable):

☐ jasper
☐ chert
☒ rhyolite
☒ quartz
☐ quartzite
☐ chalcedony
☐ ironstone
☐ argillite

☐ steatite
☐ sandstone
☐ silicified sandstone
☐ ferruginous quartzite
☐ European flint
☐ basalt
☐ unknown
☐ other:

4. Diagnostics (choose from manual and give number recovered or observed):

(1) Quartz Savannah River

5. Features present:

☐ yes
☐ no
☒ unknown

6. Types of features identified (check all applicable):

☐ midden
☐ postmolds
☐ house patterns
☐ palisade
☐ hearths
☐ chipping clusters

☐ refuse/storage pits
☐ burials
☐ ossuaries
☐ unknown
☐ other:

PREHISTORIC DATA FORM

7. Method of sampling (check all applicable):

- ☐ non-systematic surface search
☐ systematic surface collection
☐ non-systematic shovel test pits
☒ systematic shovel test pits
☐ excavation units
☐ mechanical excavation
☐ other:

extent/nature of excavation: 57 shovel test pits (50 cm diameter) excavated at
 10 or 20 meter grid intervals over extent of site. Depth ranged from
 50 to 150 cm below surface. Excavated by stratigraphic and arbitrary
 10 cm levels. All material screened ($\frac{1}{4}$ " mesh).

8. Flotation samples collected:

- ☐ yes
☒ no
☐ unknown

analyzed:

- ☐ yes, by _____
☐ no
☐ unknown

9. Samples for radiocarbon dating collected:

- ☐ yes
☒ no
☐ unknown

Dates and Lab Reference Nos. _____

10. Soil samples collected:

- ☐ yes
☒ no
☐ unknown

analyzed:

- ☐ yes, by _____
☐ no
☐ unknown

11. Other analyses (specify): _____

12. Additional comments: Laboratory analysis of artifacts in progress.

13. Form filled out by: Mary Barse

Address/Affiliation: State Highway Administration - Archeology Group

Date: 8-28-92

For Division of Archeology Use Only

14. Form transcribed by: _____

16. Form checked by: _____

17. Entered on computer by: _____

19. Form updated by: _____

15. Date: _____

18. Date: _____

20. Date: _____

Artifact Inventory Site 18H0203

Lot 1 STP #2 Level 1, A1/Ap 0-30 cm 8-5-92, RM/GH	3 Quartz decortication flakes
Lot 2 STP #2 Level 7, IIC and IIIAb 90-120 cm 8-5-92, RM/GH	5 Quartz decortication flakes
Lot 3 STP #2 Level 8, IIIC 120-130 cm 8-5-92, RM/GH	3 Quartz decortication flakes 1 Quartz core (may be redeposited)
Lot 4 STP #3 Level 1, A1/Ap 0-30 cm 8-10-92, GH/RM	2 Quartz decortication flakes 1 Quartz secondary flake
Lot 5 STP #3 Level 5, IIC/B 60-65 cm 8-10-92, GH/RM	4 Quartz decortication flakes 1 Quartz unclassifiable flake
Lot 6 STP #3 Level 6, C 65-75 cm 8-10-92, GH/RM	2 Quartz decortication flakes 1 Quartz primary flake 1 Quartz secondary flake
Lot 7 STP #4 Level 6, IIA2/E 62-72 cm 8-10-92, GH/RM	1 Quartz decortication flake
Lot 8 STP #4 Level 8, IIIAb 82-92 cm 8-10-92, GH/RM	3 Quartz decortication flakes

Artifact Inventory Site 18H0203

Lot 9
STP #5
Level 3, Apb
25-35 cm
8-5-92, RM/GH

1 Quartz decortication flake
1 Quartz primary flake
1 Quartz shatter fragment

Lot 10
STP #5
Level 4, A2/E
35-50 cm
8-5-92, RM/GH

1 Quartz biface fragment,
(midsection - preform)

Lot 11
STP #5
Level 5, B1
50-62 cm
8-5-92, RM, GH

1 Quartz primary flake

Lot 12
STP #6
Level 1, A1/Ap
0-24 cm
8-6-92, KU

2 Quartz decortication flakes
1 Quartz primary flake
3 Quartz secondary flakes

Lot 13
STP #6
Level 2, A2/E
24-34 cm
8-6-92, KU

5 Quartz decortication flakes
2 Quartz primary flakes
4 Quartz secondary flakes
1 Quartz unclassifiable flake
1 Quartzite hammerstone

Lot 14
STP #6
Level 3, A2/E
34-44 cm
8-6-92, KU

2 Quartz decortication flakes
2 Quartz primary flakes
6 Quartz secondary flakes

Lot 15
STP #6
Level 4, A2/E
44-50 cm
8-6-92, KU

2 Quartz decortication flakes

Lot 16
STP #7
Level 1, A1/Ap
0-10 cm
8-10-92, KU

1 Quartz decortication flake
1 Quartz secondary flake

Artifact Inventory Site 18H0203

Lot 17 STP #7 Level 2, A1/Ap 10-20 cm 8-10-92, KU	1 Quartz unclassifiable flake
Lot 18 STP #8 Level 1, A1/Ap 0-30 cm 8-10-92, SG	1 Quartz decortication flake 2 Quartz unclassifiable flakes
Lot 19 STP #9 Level 1, A1/Ap 0-23 cm 8-4-92, JD/GH/RM	1 Quartz core 2 Quartz decortication flakes 2 Quartz primary flakes 1 Quartz unclassifiable flake 1 Quartz chunk 1 Quartzite hammerstone
Lot 20 STP #9 Level 2, A2/E 23-33 cm 8-4-92, DJ	1 Quartz decortication flake (probably from Ap above)
Lot 21 STP #10 Level 1, A1/Ap 0-38 cm 8-4-92, AW/SG/JM	1 Quartz decortication flake 1 Quartz secondary flake
Lot 22 STP #11 Level 3, IIIC 61-73 cm 8-5-92, AW/JM	2 Quartz primary flakes (found at 73 cm)
Lot 23 STP #11 Level 4, IVAb 73-92 cm 8-4-92, AW/JM	3 Quartz decortication flakes 1 Quartzite hammerstone
Lot 24 STP #12 Level 1, A1/Ap 0-24 cm 8-5-92, KU	1 Quartz shatter fragment

Artifact Inventory Site 18H0203

Lot 25 STP #12 Level 4, IIAb 44-50 cm 8-5-92, KU	1 Quartzite (possible) hammerstone
Lot 26 STP #13 Level 3, Apb 27-35 cm 8-5-92, DJ	1 Quartz decortication flake
Lot 27 STP #13 Level 4, IC 35-45 cm 8-5-92, DJ	1 Quartz primary flake
Lot 28 STP #14 Level 1, Ap and A2/E 0-23 cm 8-6-92, KU	1 Quartz unclassifiable flake
Lot 29 STP #16 Level 1, A1/Ap 0-15 cm 8-10-92, AW	1 Quartz decortication flake 2 Quartz chunks
Lot 30 STP #16 Level 2, Ap 15-25 cm 8-10-92, AW	2 Quartz fire-cracked rocks 1 Quartz unclassifiable flake 1 Quartz core fragment
Lot 31 STP #17 Level 6, IIAb/IIA2 50-60 cm 9-22-92, DJ	2 Quartz decortication flakes 1 Quartz fire-cracked rock spall
Lot 32 STP #17 Level 7, IIA2 and IIIAb 60-70 cm 9-22-92, DJ	1 Quartz core fragment 2 Quartz decortication flakes 1 Quartz primary flake 1 Quartz secondary flake 4 Quartz fire-cracked rocks

Artifact Inventory Site 18H0203

Lot 33
STP #17
Level 8, IIIAb
70-80 cm
9-22-92, DJ

1 Quartz, preform stage biface
fragment (mid-section)
3 Quartz fire-cracked rock

Lot 34
STP #18
Level 1, A1
0-7 cm
9-22-92, SG

2 Cinders

Lot 35
STP #18
Level 2, Ap
7-36 cm
9-22-92, SG

2 Quartz decortication flakes
1 Oyster shell fragment

Lot 36
STP #18
Level 3, Ab
36-50 cm
9-22-92, SG

2 Quartz unclassifiable flakes

Lot 37
STP #18
Level 4, Ab
50-60 cm
9-22-92, SG

4 Quartz decortication flakes
1 Gneiss fragment (may be a spall
from a groundstone tool)

Lot 38
STP #18
Level 5, Ab
60-70 cm
9-22-92, SG

1 Quartz decortication flake
1 Quartz unclassifiable flake
2 Quartz fire-cracked rock

Lot 39
STP #19
Level 1, A1/Ap
0-30 cm
9-22-92, SG

1 Piece coal
1 Wrought nail fragment
2 Oyster shell fragments
4 Brick spalls
1 Brick fragment

Lot 40
STP #20
Level 1, A1/Ap
0-27 cm
9-22-92, JM

4 Quartz decortication flakes
1 Quartz shatter fragment

Artifact Inventory Site 18H0203

Lot 41	2 Quartz decortication flakes
STP #20	2 Quartz unclassifiable flakes
Level 2, Ab	
27-33 cm	
9-22-92, JM	
Lot 42	1 Quartz unclassifiable flake
STP #20	
Level 3, A2/E	
33-43 cm	
9-22-92, JM	
Lot 43	2 Quartz decortication flakes
STP #21	1 Quartz primary flake
Level 1, A1/Ap	1 Quartz unclassifiable flake
0-30 cm	1 Quartz fire-cracked rock
9-22-92, AW	1 Piece styrofoam
Lot 44	2 Quartz decortication flakes
STP #21	
Level 4, Ab	
50-60 cm	
9-22-92, AW	
Lot 45	1 Coarse red earthenware body sherd
STP #22	1 Pale blue bottle glass fragment
Level 1, A1/Ap and C	
0-54 cm	
9-17-92, JM	
Lot 46	1 Quartz decortication flake
STP #23	
Level 4, C2	
50-60 cm	
8-11-92, RM/GH	
Lot 47	2 Quartz decortication flakes
STP #25	2 Colorless, letter-embossed, glass container fragments (modern)
Level 1, A1/Ap	2 Colorless glass fragments
0- 25 cm	1 Pale olive green bottle-glass fragment
8-5-92, KU	1 Oxidized ferrous nail fragment
	1 Terra-cotta sewer pipe fragment
Lot 48	2 Quartz decortication flakes
STP #28	
Level 7, Ab	
69-75 cm	
8-10-92, AW	

Artifact Inventory Site 18HO203

Lot 49
STP #291
Level 2, A1/Ap
10-22 cm
9-17-92, AW

3 Quartz decortication flakes
Quartz chunk
1 Whiteware body sherd
1 Whiteware base sherd

Lot 50
STP #29
Level 3, Apb
22-33 cm
9-17-92, AW

1 Quartz decortication flake

Lot 51
STP #30
Level 1, A1/Ap
0-11 cm
9-17-92, DJ

1 Possible quartz decortication flake
1 Fully machine cut nail fragment

Lot 52
STP #30
Level 2, Apb
11-20 cm
9-17-92, DJ

1 Quartz shatter fragment

Lot 53
STP #31
Level 1, A1/Ap
0-30 cm
9-17-92, AW

1 Quartzite hammerstone
5 Quartz decortication flakes
4 Quartz primary flakes
3 Quartz unclassifiable flakes
1 Gneiss fragment (may be fire-cracked)
1 Coarse red earthenware body sherd
1 Oxidized nail fragment
1 Opaque white, machine-made container glass fragment

Lot 54
STP #31
Level 2, Ab
30-40 cm
9-17-92, AW

1 Quartz decortication flake

Lot 55
STP #31
Level 5, C
52-65 cm
9-17-92, AW

2 Quartz decortication flakes

Lot 56
STP #31
Level 6, IC
65-75 cm
9-17-92, AW

1 Possible quartzite hammerstone

Artifact Inventory Site 18H0203

Lot 57	1 Gneiss (possible) fire-cracked rock
STP #33	
Level 1, A1	1 Quartzite hammerstone fragment
0-8 cm	2 Quartz secondary flakes
8-11-92, SG	2 Quartz unclassifiable flakes
Lot 58	1 Gneiss hammerstone
STP #33	1 Quartz decortication flake
Level 2, Ap	
8-30 cm	
8-11-92, SG	
Lot 59	2 Quartz core fragments
STP #34	19 Quartz decortication flakes
Level 3, Ab	2 Quartz primary flakes
48-75 cm	3 Quartz unclassifiable flakes
8-5-92, JM	
Lot 60	1 Quartz shatter fragment
STP #35	
Level 2, A2/E	
28-38 cm	
8-6-92, DJ	
Lot 61	2 Quartz decortication flake
STP #35	
Level 5, IIAb	
58-68 cm	
8-6-92, DJ	
Lot 62	1 Quartz decortication flakes
STP #35	
Level 6, IIA2/E	
68-78 cm	
8-6-92, DJ	
Lot 63	1 Quartz primary flake
STP #35	
Level 7, IIA2	
88-98 cm	
8-6-92, DJ	
Lot 64	1 Quartz decortication flake
STP #36	
Level 2, Ap	
14-24 cm	
8-10-92, AW	
Lot 65	2 Quartz unclassifiable flakes
STP #36	1 Quartz shatter fragment
Level 9, IIAb	
84-94 cm	
8-10-92, AW	

Artifact Inventory Site 18H0203

Lot 66	2 Quartz decortication flakes
STP #36	1 Quartz unclassifiable flake
Level 10, IIA2/E	1 Quartz shatter fragment
94-104 cm	
8-10-92, AW	
Lot 67	1 Quartz primary flake
STP #37	
Level 2, Ap	
20-30 cm	
8-10-92, AW	
Lot 68	1 Whiteware spall
STP #38	
Level 1, A1	
0-9 cm	
9-22-92, JM	
Lot 69	1 Quartz decortication flake
STP #39	1 Quartz unclassifiable flake
Level 5, Ab	
40-50 cm	
9-22-92, DJ	
Lot 70	5 Quartz decortication flakes
STP #39	4 Quartz unclassifiable flakes
Level 6, Ab	
50-60 cm	
9-22-92, DJ	
Lot 71	1 Quartz decortication flake
STP #39	1 Quartz primary flake
Level 7, Ab	1 Quartz secondary flake
60-70 cm	2 Quartz unclassifiable flakes
9-22-92, DJ	
Lot 72	1 Quartz decortication flake
STP #39	1 Quartz unclassifiable flake
Level 8, A2/E	
70-90 cm	
9-22-92, DJ	
Lot 73	1 Quartz primary flake
STP #40	
Level 9, IIIAb	
81-91 cm	
9-22-92, AW	
Lot 74	2 Oyster shell fragments
STP 41	
Level 1, A1/Ap	
0-20 cm	
9-24-92, SG	

Artifact Inventory Site 18H0203

Lot 75	1 Quartz biface fragment
STP #41	1 Quartz decortication flake
Level 4, Vab or VC	4 Quartz unclassifiable flakes
60-70 cm	
9-24-92, SG	
 Lot 76	 1 Quartz decortication flake
STP #41	1 Quartz primary flake
Level 5, VIAb	
70-80 cm	
9-24-92, SG	
 Lot 77	 2 Quartz decortication flakes
STP #41	1 Quartz unclassifiable flake
Level 6, VIAb	
80-90 cm	
9-24-92, SG	
 Lot 78	 1 Quartz chunk
STP #42	
Level 6, A2/E or IC	
43-53 cm	
9-24-92, DJ	
 Lot 79	 1 Quartz decortication flake
STP 42	
Level 9, IIA2/E or IIC	
and IIIAb	
73-83 cm	
9-24-92, DJ	
 Lot 80	 1 Quartz decortication flake
STP #43	1 Coarse red earthenware spall
Level 1, A1/Ap	1 Pearlware rim sherd with blue shell
0-20 cm	edge decoration
9-21-92, SG	3 Whiteware body sherds
	1 Refined white earthenware spall,
	otherwise unidentifiable
	1 Very weathered and eroded white clay
	pipe bowl fragment
	1 Dark olive bottle glass fragment
	1 Pale blue bottle glass fragment
	2 Pale green container glass
	fragments (modern)
	2 Colorless container glass
	fragments (modern)
	1 Brown container glass
	fragment (modern)
	1 Burned brick fragment
	25 Pieces coal
	1 Oxidized cut nail fragment
	8 Oxidized nail fragments,
	otherwise unidentifiable

Artifact Inventory Site 18H0203

Lot 80 Continued

- 7 Copper alloy fragments,
otherwise unidentifiable
- 2 Bone fragments, otherwise
unidentifiable

Lot 81
STP #43
Level 2, Apb
20-50 cm
9-21-92, SG

- 1 Heavily eroded coarse red
earthenware rim sherd
- 1 Colorless container glass fragment
- 1 Heavily oxidized ferrous metal
fragment, otherwise unidentifiable
- 1 Heavily oxidized spike

Lot 82
STP #44
Level 1, A1/Ap
0-25 cm
9-21-92, DJ

- 2 Colorless glass fragments
- 1 Colorless window glass fragment
- 3 Oxidized nail fragments,
otherwise unidentifiable

Lot 83
STP #44
Level 2, Apb
25-40 cm
9-21-92, SG

- 1 Whiteware spall
- 1 Colorless curved glass fragment
- 1 Oxidized nail fragment, otherwise
unidentifiable

Lot 84
STP #45
Level 1, A1/Ap
0-27 cm
9-17-92, AW

- 2 Whiteware rim sherds

Lot 85
STP #45
Level 6, IIAb
47-49 cm
9-17-92, AW

- 1 Rhyolite primary flake

Lot 86
STP #45
49-59 cm
Level 7, IIAb
9-17-92, AW

- 1 Quartz unclassifiable flake

Lot 87
STP #46
Level 1, A1/Ap
0-29 cm
9-17-92, JM

- 4 Quartz decortication flakes
- 1 Quartz primary flake
- 1 Hard paste porcelain fragment
- 2 Colorless container glass fragments
- 2 Oxidized, unidentifiable nails
- 3 Pieces coal
- 4 Oyster shell fragments

Artifact Inventory Site 18H0203

Lot 88	1 Quartz secondary flake
STP #46	1 Hard paste porcelain fragment
Level 2, IIApb	3 Oyster shell fragments
29-42 cm	
9-17-92, JM	
Lot 89	3 Quartz decortication flakes
STP #46	1 Quartz primary flake
Level 3, Ab	1 Quartz unclassifiable flake
42-60 cm	
9-17-92, JM	
Lot 90	1 Quartz decortication flake
STP #49	
Level 10, IVA2b	
94-104 cm	
8-5-92, AW	
Lot 91	1 Quartz decortication flake
STP #49	3 Quartz unclassifiable flakes
Level 11, IVA2b	
104-114 cm	
8-5-92, AW	
Lot 92	1 Quartzite fire-cracked rock spall
STP #49	
Level 12, IVA2b	
114-124 cm	
8-5-92, AW	
Lot 93	1 Quartz decortication flake
STP #50	1 Quartz shatter fragment
Level 4, IIAb	
70-87 cm	
8-6-92, JM	
Lot 94	1 Quartz decortication flake
STP #51	
Level 2, A2/E	
20-30 cm	
8-6-92, DJ	
Lot 95	2 Quartz decortication flakes
STP #51	
Level 5, A2/E	
50-60 cm	
8-6-92, DJ	
Lot 96	1 Quartz secondary flake
STP #51	
Level 7, A3	
70-80 cm	
8-6-92, DJ	

Artifact Inventory Site 18HO203

Lot 97
STP #52
Level 2 Ap
17-27 cm
8-10-92, JM/KU

1 Quartz unclassifiable flake

Lot 98
STP #52
Level 4, IIAb
37-49 cm
8-10-92, JM/KU

1 Quartz Early Woodland ovate-based projectile point (Piscataway)

Lot 99
STP #53
Level 1, A1/Ap
0-25 cm
9-21-92, SG

3 Quartz unclassifiable flakes
1 Creamware spall
1 Whiteware rim sherd with blue shell edge decoration
1 Coarse red earthenware body sherd with dark brown lead glaze
1 Terra-cotta spall
1 Amber bottle glass fragment
1 Dark olive bottle glass fragment
4 Clear brown container glass fragments (modern)
2 Pale blue container glass fragments
3 Colorless container glass fragments (modern)
4 Pale green window glass fragments
13 Brick spalls
3 Brick fragments
9 Oxidized nail fragments, otherwise unidentifiable
4 Pieces coal
1 Cinder
1 Bone fragment

Lot 100
STP #53
Level 2, Apb
25-52 cm
9-21-92, SG

4 Quartz decortication flakes
2 Creamware spalls
2 Pearlware body sherds
1 Pearlware rim sherd
1 Terra-cotta body sherd
1 Clear green bottle glass fragment
1 Colorless window glass fragment
2 Pale green window glass fragments
1 Copper alloy button with shank attachment
1 Zinc alloy lump
1 Copper alloy buckle with two-prong, ferrous tang and pivot (harness buckle)
6 Heavily oxidized nail fragments, otherwise unidentifiable
2 Brick fragments
2 Very weathered, decomposing bone

Artifact Inventory Site 18H0203

Lot 100 Continued	fragments, otherwise unidentifiable
Lot 101	1 Decomposing bone fragment
STP #53	
Level 3, IIAPb	
52-62 cm	
9-21-92, SG	
Lot 102	1 Salt glazed stoneware base sherd
STP #54	1 Pale green, full-size contact mold-
Level 1, A1/Ap	blown, bottle glass fragment with
0-30 cm	slug-plate letter embossing (1850-
9-21-92, DJ	1915)
	1 Pale green window glass fragment
	1 Brick fragment
	3 Oxidized nail fragment, otherwise
	unidentifiable
Lot 103	1 Quartz decortication flake
STP #55	2 Colorless container glass fragments
Level 1, A1/Ap	1 Pale green tinted window glass
0-15 cm	fragment
9-21-92, AW	
Lot 104	1 Wrought nail
STP #55	
Level 4, Fill	
35-47 cm	
9-21-92, AW	
Lot 105	2 Oyster shell fragments
STP #56	1 Brown bottle glass fragment
Level 1, A1/Ap	(modern)
0-20 cm	
9-17-92, DJ	
Lot 106	1 Quartz unclassifiable flake
STP #56	
Level 7, Apb	
56-66 cm	
9-17-92, DJ	
Lot 107	1 Piece coal
STP #63	2 Colorless glass fragments
Level 1, A1/Ap	(modern)
0-25 cm	
9-24-92, SG	
Lot 108	1 Quartz primary flake
STP #65	1 Burned pearlware spall with blue
Level 1, Ao	transfer printed decoration
0-2 cm	
9-24-92, DJ	

Artifact Inventory Site 18H0203

Lot 109 STP #65 Level 2, A1 2-12 cm 9-24-92, DJ	1 Burned pearlware spall with blue transfer printed decoration
Lot 110 STP #66 Level 3, Ap 23-33 cm 9-24-92, AW	1 Possible quartz decortication flake
Lot 111 STP #70 Level 1, A1/Ap 0-18 cm 9-29-92, DJ	1 Refined white earthenware spall 1 Brick fragment 1 Pale green window glass fragment
Lot 112 STP #70 Level 2, Fill 18-36 cm 9-29-92, DJ	4 Burned brick fragments
Lot 113 STP #71 Level 1, A1/Ap 0-17 cm 9-29-92, AW	1 Sewer tile fragment 1 Colorless glass fragment
Lot 114 STP #71 Level 2, Apb 17-26 cm 9-29-92, AW	1 Quartz decortication flake
Lot 115 STP #74 Level 1, A1/Ap 0-22 cm 9-28-92, DJ	1 Polychrome hand-painted pearlware body sherd 1 Opaque white container glass fragment 1 Wire nail
Lot 116 STP # 75 Level 1, A1/Ap 0-17 cm 9-29-92, AW	1 Quartz decortication flake 1 Brown bottle glass fragment (modern)
Lot 117 STP #77 Level 1, A1/Ap 0-22 cm 9-28-92, DJ	1 Quartz decortication flake 1 Pearlware spall

Artifact Inventory Site 18H0203

Lot 118 STP #78 Level 1, A1/Ap 0-25 cm 9-29-92, JM	1 Quartz decortication flake
Lot 119 STP #79 Level 1, A1 0-10 cm 9-28-92, DJ	1 Quartz primary flake 3 Quartz unclassifiable flakes 1 Oxidized nail fragment, otherwise unidentifiable 1 Steel wire brush fragment 1 Cinder
Lot 120 STP #79 Level 2, Ap 10-21 cm 9-28, 92, DJ	3 Quartz decortication flakes 1 Colorless light bulb glass fragment 3 Brick fragments 1 Piece coal
Lot 121 STP #80 Level 1, A1/Ap 0-28 cm 9-25-92, SG	1 Quartz decortication flake 2 Quartz primary flakes 2 Quartz secondary flakes 4 Quartz unclassifiable flakes 6 Brick fragments 1 Oxidized cut nail fragment
Lot 122 STP #81 Level 1, A1/Ap 0-20 cm 9-29-92, DJ	2 Rhyolite primary flakes 2 Quartz decortication flakes 1 Quartz secondary flake 1 Pearlware spall 1 Light green bottle glass fragment 1 Oyster shell fragment
Lot 123 STP #82 Level 1, A1/Ap 0-42 cm 9-29-92, AW	1 Quartz primary flake 1 pale green window glass fragment
Lot 124 STP #83 Level 1, A1/Ap 0-20 cm 9-29-92, DJ	1 Rhyolite primary flake 1 Quartz decortication flake 1 Quartz primary flake
Lot 125 STP #84 Level 1, A1/C 0-15 cm 9-29-92, JM	1 Refined red earthenware body sherd (burned) 1 Pearlware spall 2 Pale green window glass fragments 3 Burned brick fragments 1 Burned oyster shell fragments

Artifact Inventory Site 18HO203

Lot 126
STP #85
Level 1, A1/Ap
0-20 cm
9-29-92, DJ

2 Quartz decortication flakes
3 Pearlware spalls
1 Yellow ware spall
1 White clay tobacco pipe stem
fragment
1 Pale blue tinted window glass
fragment
1 Colorless container glass fragment
(modern)
3 Wire nail fragments
1 Fully machine cut nail fragment
3 brick fragments
1 Burned brick fragment

Lot 127
STP #86
Level 1, A1/Ap
0-17 cm
9-29-92, AW

1 Quartz secondary flake
1 Pearlware spall
3 Colorless container glass
fragments (modern)

Lot 128
STP #87
Level 1, A1/Ap
0-30 cm
9-29-92, AW

1 Quartz decortication flake
1 Quartz primary flake
1 Quartz unclassifiable flake
1 Whiteware spall
1 Refined white earthenware spall,
otherwise unidentifiable
2 Glazed sewer tile fragments

Lot 129
STP # 88
Level 1, A1/Ap
0-24 cm
9-29-92, AW

3 Quartz decortication flakes
1 Quartz primary flake
1 Quartz unclassifiable flake
1 Edge embossed pearlware spall,
otherwise unidentifiable

Lot 130
STP #89
Level 2, C (slope wash)
20-33 cm
9-29-92, JM

2 Pale green tinted window glass
fragments

Lot 131
STP #90
Level 1, A1
0-18 cm
9-29-92, JM

1 Glazed porcelain tile fragment
(modern architectural material)
2 Whiteware spalls
1 Colorless window glass fragment

Artifact Inventory Site 18HO204

LOT 1	2 Quartz secondary flakes
STP# 12	
Level 1, A1/Ap	
0-32 cm	
8/12/92, GH/RM	
 LOT 2	 1 Quartz decortication flake
STP# 15	
Level 3, Apb	
27-35 cm	
8/14/92, AW	
 LOT 3	 1 Quartz unclassifiable fragment
STP# 19	
Level 1, A1/Ap	
0-24 cm	
8/14/92, JM	
 LOT 4	 2 Pieces coal (discarded)
STP# 25	2 Quartz fire-cracked rocks
Level 1, A1/Ap	5 Quartz decortication flakes
0-30 cm	2 Quartz secondary flakes
8/14/92, MB/DJ	1 Quartz unclassifiable flake
	3 Quartz shatter fragments
 LOT 5	 1 Quartz primary flake
STP# 28	
Level 1, Ap	
0-22 cm	
8/14/92, AW	
 LOT 6	 1 Quartz fire-cracked rock
STP# 37	1 Quartz unclassifiable flake
Level 3, A2/E, B1	1 Quartz chunk
36-50 cm	
8/17/92, JM	
 LOT 7	 1 Quartz secondary flake
STP# 38	
Level 1, A1/Ap	
0-24 cm	
8/17/92, SG/AW	
 LOT 8	 1 Quartz primary flake
STP# 39	
Level 1, A1/Ap	
0-25 cm	
8/17/92, SG	

Artifact Inventory Site 18H0204

LOT 9
STP# 40
Level 1, A1/Ap
0-13 cm
8/17/92, DJ

7 Quartz decortication flakes
5 Quartz primary flakes
2 Quartz unclassifiable flakes

LOT 10
STP# 40
Level 2, Ap
13-20 cm
8/17/92, DJ

1 Quartzite thermally altered cobble
1 Quartz core (bipolar)
15 Quartz decortication flakes
5 Quartz primary flakes

LOT 11
STP# 40
Level 3, Apb
20-30 cm
8/17/92, DJ

15 Quartz decortication flakes
4 Quartz primary flakes
3 Quartz secondary flakes
7 Quartz unclassifiable flakes

LOT 12
STP# 40
Level 4, Apb
30-37 cm
8/17/92, DJ

15 Quartz decortication flakes
6 Quartz primary flakes
2 Quartz secondary flakes
2 Quartz unclassifiable flakes

LOT 13
STP# 40
Level 5, B1
37-47 cm
8/17/92, DJ

4 Quartz decortication flakes
2 Quartz primary flakes
1 Quartz unclassifiable flake

LOT 14
STP# 41
Level 1, A1/Ap
0-30 cm
8/17/92, SG

3 Quartz decortication flakes
1 Quartz primary flake
2 Quartz unclassifiable flakes

LOT 15
STP# 42
Level 1, A1/Ap
0-10 cm
8/17/92, AW

1 Quartz decortication flake

LOT 16
STP# 45
Level 1, A1/Ap
0-22 cm
8/17/92, SG

1 Quartz decortication flake

LOT 17
STP# 48
Level 1, A1/Ap
0-15 cm, 8/17/92, GH/RM

1 Quartz unclassifiable flake

Artifact Inventory Site 18H0205

Lot 1
STP #60
Level 1, A1/Ap
0-25 cm
8-4-92, JM/SG

- 15 Window glass fragments
 - 1 Brown (modern) bottle glass fragment
 - 1 Orange brick fragment
 - 2 Otherwise unidentifiable ferrous metal fragments
 - 2 Oxidized wire nails
 - 4 Asphalt roofing shingle fragments
 - 5 Pieces of coal

Lot 2
STP #61
Level 1, Ap
0-13 cm
8-4-92, AW

- 3 Window glass fragments
 - 1 Colorless, letter embossed, glass container fragment
 - 3 Oxidized wire nails

Lot 3
STP #62
Level 1, Ap
0-9 cm
8-4-92, RM/GH

- 9 Window glass fragments
 - 2 Colorless machine-made bottle fragments
 - 1 Brown bottle glass fragment
 - 1 Piece lead-glazed sewer tile
 - 1 Oxidized nail fragment, otherwise unidentifiable
 - 2 Pieces of coal
 - 3 Pieces of styrofoam

Lot 4
STP #63
Level 1, A1
0-13 cm
8-4-92 KU

- 2 Oxidized ferrous metal fragments
- 3 Oxidized ferrous wire nails
- 1 Colorless, machine-made tumbler fragment

Lot 5
STP #65
Level 1, Fill
0-18 cm
8-4-92, AW

- 10 Pieces (sample) burned coal and cinders
- 3 Oxidized ferrous wire nails

Lot 6
STP #66
Level 1, A1/Ap
0-20 cm
8-4-92, JM/SG

- 5 Window glass fragments
- 10 Colorless, curved, glass container fragments
 - 6 Brown curved, glass container fragments
 - 1 Oxidized ferrous wire nail
- 13 Orange brick fragments
 - 1 Red brick fragment
 - 3 Asphalt roofing shingle fragments
 - 9 Pieces of coal
 - 1 Butcher-cut bone fragment

Artifact Inventory Site 18H0205

Lot 7
STP #67
Level 1, A1/Ap
0-15 cm
8-4-92, DJ/GH

2 Colorless glass fragments
1 Whiteware body sherd

Artifact Inventory Site 18H0206

Lot 1
STP# 2
Level 3, IIAB
80-90 cm
7/29/92, AW

1 Quartz decortication flake
1 Quartz fire cracked rock

STP# 3
Level 2, Apb
8-39 cm
7/29/92, JM

3 Pieces of coal (discarded)

Lot 2
STP# 4
Level 3, IC
30-58 cm
7/28/92, KU

1 White ball clay tobacco pipe stem
fragment, molded decoration
(at 38 cm)

Lot 3
STP# 4
Level 4, IIAB
58-70 cm
7/29/92, KU

1 Quartz decortication flake
(at 70 cm)

Lot 4
STP# 5
Level 1, A1/Ap
0-25 cm
7/28/92, JM

2 Quartz decortication flakes
1 Piece brown bottle glass, modern
(discarded)

Lot 5
Stp# 5
Level 2, Apb
25-35 cm
7/28/92, JM

1 Quartz primary flake

Lot 6
STP# 6
Level 2, Ap
10-30 cm
7/28/92, KU

2 Quartz decortication flakes
1 Quartz primary flake
1 Piece of coal (discarded)

Lot 7
STP# 7
Level 1, A1/Ap
0-25 cm
7/29/92, SG

1 Quartz decortication flake
10 Pieces of coal (discarded)
1 Colorless flat window glass
fragment (discarded)

Lot 8
STP# 7
Level 4, C/B
65-90 cm
7/29/92, SG

3 Quartz decortication flakes
1 Quartz secondary flake
(at 65 cm)

Artifact Inventory Site 18H0206

Lot 9	3 Quartz decortication flakes
STP# 8	1 Quartz secondary flake
Level 1, A1/Ap	3 Dark brown bottle glass fragments
0-30 cm	(discarded)
7/29/92, KU	1 Ferrous metal fragment
	(discarded)
	1 Piece of coal (discarded)
Lot 10	2 Quartz decortication flakes
STP# 9	8 Pieces of coal (discarded)
Level 1, A1/Ap	
0-25 cm	
7/29/92, SG	
STP# 10	5 Pieces of coal (discarded)
Level 1, A1/Ap	
0-23 cm	
7/29/92, SG	
Lot 11	1 Quartz decortication flake
STP# 11	1 Coarse red earthenware spall
Level 1, A1/Ap	(discarded)
0-32 cm	
7/29/92, KU	
Lot 12	2 Rhyolite secondary flakes
STP# 11	
Level 2, A2/E, B1	
32-80 cm	
7/29/92, KU	
Lot 13	2 Quartz primary flakes
STP# 12	1 Quartz core
Level 1, A1/Ap	1 Piece of coal (discarded)
0-25 cm	
7/29/92 SG	
STP# 15	2 Pieces of coal (discarded)
Level 1, Ap	
0-29 cm	
7/29/92, JM	
STP# 16	1 Colorless glass fragment
Level 2, IC	(discarded)
25-59 cm	1 Green glass fragment (discarded)
7/30/92, JM/SG	8 Pieces of coal (discarded)
Lot 14	1 Quartz decortication flake
STP# 16	
Level 3, IIAb	
59-73cm	
7/30/92, JM/SG	

Artifact Inventory Site 18H0206

Lot 15	3 Quartz decortication flakes
STP# 17	1 Whiteware body sherd (discarded)
Level 1, A1/Ap	
0-35 cm	
7/30/92, GH/RM	
Lot 16	1 Quartz decortication flake
STP# 18	1 Quartz secondary flake
Level 1, A1/Ap	1 Colorless window glass fragment (discarded)
0-25 cm	1 Piece of plastic (discarded)
7/30/92, KU/DJ	
Lot 17	2 Quartz decortication flakes
STP# 19	1 Quartz unclassifiable flake
Level 1, A1/Ap	3 Pieces of coal (discarded)
0-17 cm	1 Orange brick fragment (discarded)
7/30/92, JM/SG	
STP# 20	2 Colorless window glass fragments (discarded)
Level 1, A1/Ap	
0-20 cm	
7/30/92, KU/DJ	
STP# 22	2 Orange brick fragments (discarded)
Level 1, A1/Ap	1 Piece of coal (discarded)
0-25 cm	
7/29/92, AW	
Lot 18	2 Quartz decortication flakes (at 75-80 cm)
STP# 22	
Level 2, IIAb	
60-80cm	
7/30/92, AW	
Lot 19	1 Oxidized ferrous nail (discarded)
STP# 23	1 Piece of coal (discarded)
Level 1, A1/Ap	1 Quartz decortication flake
0-25 cm	
7/30/92, JM/SG	
Lot 20	2 Quartz decortication flakes
STP# 23	1 Quartz primary flake
Level 3, IIAb	1 Quartz secondary flake
60-70 cm	
7/30/92, JM/SG	
Lot 21	2 Quartz secondary flakes
STP# 25	1 colorless window glass fragment (discarded)
Level 1, A1/Ap	1 Whiteware body sherd (discarded)
0-30 cm	1 Whiteware rim sherd (discarded)
7/30/92, GH/RM	

Artifact Inventory Site 18HO206

Lot 22
STP# 26
Level 1, A1/Ap
0-38 cm
7/30/92, SG/DJ

1 Quartz secondary flake
1 Quartz tertiary flake
5 Pieces of coal (discarded)

Lot 23
STP# 27
Level 1, A1/Ap
0-35 cm
7/30/92
GH/RM

1 Quartz secondary flake

STP# 29
Level 1, A1/Ap
0-25cm
8/3/92, DJ

1 Piece of coal (discarded)

STP# 30
Level 1, A1/Ap
0-21 cm
7/31/92, AW

3 Pieces of plastic (discarded)
1 Piece of coal (discarded)

Lot 24
STP# 31
Level 1, A1/Ap
0-25 cm
8/3/92, JM/SG

1 Quartz decortication flake
5 Pieces of coal (discarded)

Lot 25
STP# 32
Level 1, A1/Ap
0-30 cm
7/31/92, SG

1 Quartzite secondary flake
4 Quartz secondary flakes
4 Quartz unclassifiable flakes
1 Piece of coal (discarded)

Lot 26
STP# 33
Level 1, A1/Ap
0-25 cm
8/3/92, JM/SG

1 Quartz core
1 Quartz core rejuvenation flake
7 Quartz decortication flakes
1 Quartz secondary flake
2 Quartz unclassifiable flakes
1 Quartz block shatter fragment
1 Rhyolite secondary flake

Lot 27
STP# 33
Level 2, A2/E
25-35 cm
8/3/92, JM/SG

1 Quartz unclassifiable flake

Artifact Inventory Site 18H0206

Lot 28
STP# 34
Level 1 Ap, IIAp,
III AP
0-35 cm
7/31/92, JM/SG

63 Quartz decortication flakes
12 Quartz primary flakes
14 Quartz secondary flakes
1 Quartz tertiary flake
9 Quartz unclassifiable flakes
6 Quartz shatter fragments
1 Quartz core fragment
1 Quartz biface fragment
(midsection-preform)
2 Quartzite secondary flakes
1 Rhyolite unclassifiable flake
4 Orange brick fragments
(discarded)
1 pale-green tinted window glass
fragment (discarded)
7 Pieces of coal (discarded)

Lot 29
STP# 34
Level 2, IIIAp,
A2/E
7/31/92, SG/JM

3 Quartz decortication flakes
3 Quartz primary flakes
3 Quartz secondary flakes
4 Quartz unclassifiable flakes
1 Piece of coal (discarded)

Lot 30
STP# 34
Level 3, B1, B2
50-60 cm
7/31/92, SG/JM

3 Quartz decortication flakes
1 Quartz primary flake
1 Quartz secondary flake
1 Quartz shatter fragment

Lot 31
STP# 35
Level 1, A1/Ap
0-28 cm
8/3/92, JM/SG

1 Quartz decortication flake
1 Quartz secondary flake
2 Quartz unclassifiable flakes
1 Piece of coal (discarded)

Lot 32
STP# 35
Level 2, A2/E
28-38 cm
8/3/92, JM/SG

1 Quartz decortication flake

Lot 33
STP# 36
Level 1, A1/Ap
0-30 cm
7/31/92, DJ

1 Quartz decortication flake
1 Quartz unclassifiable flake
1 Piece of green plastic
(discarded)

Lot 34
STP# 36
Level 2, B1
30-60 cm
7/31/92, DJ

1 Quartz decortication flake
(at 40 cm)

Artifact Inventory Site 18H0206

Lot 35 STP# 37 Level 1, A1/Ap 0-30 cm 8/3/92, DJ	1 Quartz secondary flake
Lot 36 STP# 39 Level 1, A1/Ap 0-27 cm 8/3/92, RM/GH	1 Quartz decortication flake 1 Pieces of coal (discarded)
Lot 37 STP# 39 Level 6, IVC/B 83-93cm 8/3/92, RM/GH	1 Quartz decortication flake 2 Quartz primary flakes 1 Quartz unclassifiable flake
Lot 38 STP# 42 Level 2, Apb 10-32 cm 7/31/92, GH/RM	1 Quartz decortication flake
Lot 39 STP# 43 Level 1, A1/Ap 0-28 cm 7/31/92, DJ	1 Quartzite primary flake
Lot 40 STP# 43 Level 2, A2/E 28-42 cm 7/31/92, DJ	1 Quartzite unclassifiable flake
Lot 41 STP# 45 Level 3, IIApb 21-48 cm 7/31/92, DJ	3 Quartz decortication flakes
Lot 42 STP# 45 Level 7, IIIC/B 77-87 cm 7/31/92, DJ	2 Quartz decoritcation flakes
Lot 43 STP# 46 Level 1, Ap 0-30 cm 7/31/92, JM/SG	1 Quartz decortication flake

Artifact Inventory Site 18H0206

Lot 44	1 Quartz core
STP# 47	1 Whiteware body sherd (discarded)
Level 1, Ap	
0-28 cm	
7/31/92, SG/JM	
Lot 45	1 Quartz core
STP# 47	8 Quartz decortication flakes
Level 3, IIAb	1 Quartz secondary flake
52-82 cm	
7/31/92, JM/SG	
Lot 46	1 Quartz primary flake
STP# 48	
Level 3, IIC	
42-69 cm	
7/31/92, AW	
Lot 47	1 Quartz decortication flake
STP# 48	1 Quartzite fire cracked rock
Level 4, IIC, IIIAb	
69-88 cm	
7/31/92, AW	
Lot 48	1 Quartz primary flake
STP# 49	1 Piece slag (discarded)
Level 2, Apb	
15-33 cm	
7/31/92, AW	
Lot 49	16 Quartz decortication flakes
STP# 49	2 Quartzite fire cracked rocks
Level 4, IIIAb	
55-83 cm	
8/3/92, AW	
Lot 50	11 Quartz decortication flakes
STP# 49	1 Quartzite hammerstone fragment
Level 5, IIIC	
83-90 cm	
8/3/92, AW	
Lot 51	4 Quartz decortication flakes
STP# 49	1 Quartz primary flake
Level 6, IIIC	
90-100 cm	
8/3/92, AW	
Lot 52	9 Quartz decortication flakes
STP# 49	1 Quartz primary flake
Level 7, IVC	1 Quartz secondary flake
100-110 cm	2 Quartz unclassifiable flakes
8/3/92, AW	

Artifact Inventory Site 18H0206

Lot 53
STP# 49
Level 8, IVC
110-120 cm
8/3/92, AW

1 Quartz core
18 Quartz decortication flakes
4 Quartz primary flakes
5 unclassifiable flakes

Lot 54
STP# 49
Level 9, VC
120-130 cm
8/3/92 AW

1 Quartz core (bipolar)
7 Quartz decortication flakes
1 Quartz unclassifiable flake

Lot 55
STP# 49
Level 10, VC
130-135 cm
8/3/92, AW

1 Quartz core (bipolar)
28 Quartz decortication flakes
1 Quartzite hammerstone fragment
1 Quartzite fire-cracked rock
1 Quartz chunk
2 Quartz shatter fragments
2 Quartz primary flakes
2 Quartz secondary flakes
5 Quartz unclassifiable flakes

STP 50
Level 1, A1, IC, IIC
0-25 cm
7/31/92, KU

1 Piece of white plastic
(discarded)
1 Piece of transparent cellophane
(discarded)

Lot 56
STP# 51
Level 1, Ap
0-30 cm
7/31/92, KU

1 White ball clay tobacco pipe bowl
fragment
2 Quartz decortication flakes
1 Quartz unclassifiable flake

Lot 57
STP# 52
Level 1, A1/Ap
0-23 cm
8/3/92, AW

1 Quartz decortication flake
2 Quartz unclassifiable flakes

Lot 58
STP# 52
Level 2, A2/E
23-33 cm
8/3/92, AW

1 Quartz primary flake
2 Quartz secondary flakes

Lot 59
STP# 53
Level 1, A1/Ap
0-30 cm
8/3/92, KU

1 Quartz Late Archaic straight
stemmed projectile point
fragment (Savannah River)
1 Quartz core
6 Quartz decortication flakes
5 Quartz primary flakes
3 Quartz unclassifiable flakes
1 Quartzite hammerstone

Artifact Inventory Site 18H0206

Lot 60
STP# 53
Level 2, A2/E
30-40 cm
8/3/92 KU

1 Quartz decortication flake

Lot 61
STP# 53
Level 3, A2/E
40-50 cm
8/4/92, AW

1 Quartz secondary flake

Lot 62
STP# 54
Level 1, A1/Ap
0-25 cm
8/3/92, JM/SG

24 Quartz decortication flakes
9 Quartz primary flakes
8 Quartz secondary flakes
12 Quartz unclassifiable flakes
1 Rhyolite secondary flake
2 Quartzite decortication flakes
2 Orange brick fragments
(discarded)
7 Pieces of coal (discarded)
1 Piece colorless window glass

Lot 63
STP# 54
Level 2, C/B
25-35 cm
8/3/92, JM/SG

2 Quartz decortication flakes
1 Quartz secondary flakes

Lot 64
STP# 55
Level 2, Ap
5-15 cm
8/4/92, GH/RM

10 Quartz decortication flakes

Lot 65
STP# 57
Level 1, Ap
0-20 cm
8/4/92, KU

1 Quartz decortication flake

Appendix IV Shovel Test Pit Data and Soil Strata Descriptions

Shultz Farm Property - South of Shallow Run

STP	Horizon	Depths	Description	Artifacts
1	IC	0-16 cm	mixed 10YR 4/4 & 10YR 7/3 fine to medium loamy sand	none
	IIC	16-25 cm	homogeneous 10YR 4/3 fine sandy loam	none
	IIIC	25-30 cm	10YR 5/3 silt loam, gleyed with 2.5YR 5/8 mottling	none
	IVC	30-90 cm	10YR 4/4 fine sandy loam	none
	VC	90-105 cm	10YR 6/4 fine to medium loamy sand	none
	VIC	105-125cm	7.5YR 5/8 fine to medium loamy sand	none
2	A1	0-5 cm	10YR 4/4 sandy loam	Lot 1 (P)
	Ap	5-28 cm	10YR 4/3 sandy loam	Lot 1 (P)
	IC	28-90 cm	10YR 4/6 sandy loam	none
	IIC	90-100 cm	5YR 4/6 coarse loamy sand	Lot 2 (P)
	IIIAb	100-117cm	10YR 4/2 sandy loam	Lot 2 (P)
	IIIC	117-130cm	10YR 5/4 coarse loamy sand with pebbles, gravel, cobbles	Lot 3 (P)
3	A1/Ap	0-30 cm	10YR 3/4 fine sandy loam	Lot 4 (P)
	A2/E	30-40 cm	10YR 4/4 fine sandy loam	none
	IIAb	40-52 cm	10YR 4/6 fine sandy loam	none
	IIC/B	52-66 cm	10YR 5/6 compact sandy loam	Lot 5 (P)
	C	66-80 cm	10YR 5/8 loamy sand	Lot 6 (P)
4	A1/Ap	0-35 cm	10YR 4/4 fine sandy loam	none
	IC	35-45 cm	10YR 6/4 fine sandy loam	none
	IIAb	45-60 cm	10YR 3/4 fine sandy loam	none
	IIA2/E	60-80 cm	10YR 4/6 fine sandy loam	Lot 7 (P)
	IIIAb	80-90 cm	10YR 3/4 fine sandy loam	Lot 8 (P)
	IIIA2 or			
	IIIC1	90-130 cm	10YR 4/6 fine sandy loam	none
5	IIIC2	130 cm +	10YR 6/2 fine loamy sand	none
	A1/Ap	0-15 cm	10YR 4/3 silt loam	none
	Apb	15-32 cm	10YR 4/4 silt loam	Lot 9 (P)
	A2/E	32-50 cm	10YR 4/4 silt loam with manganese staining	Lot 10 (P)

Shultz Farm Property - South of Shallow Run

STP	Horizon	Depths	Description	Artifacts
5	B1	50-73 cm	10YR 5/2 silty clay loam with heavy 7.5YR 5/8 mottling	Lot 11 (P)
	B2	73-97 cm	10YR 4/1 sandy clay loam; gleyed	none
	C	97 cm +	10YR 4/1 medium-coarse loamy sand with dense gravel and pebbles	none
6	A1/Ap	0-20 cm	10YR 4/4 silt loam	Lot 12 (P)
	Apb	20-27 cm	10YR 3/6 silt loam	Lot 12 (P)
	A2/E	27-52 cm	10YR 4/6 silt loam with numerous manganese concretions (P)	Lots 13-15
	C/B	52-76 cm	Predominantly 10YR 5/8 sandy loam with 7.5YR 5/8 mottling	none
	C	76-98 cm	10YR 5/3 medium loamy sand with numerous pebbles and gravel	none
7	A1/Ap	0-25 cm	10YR 4/6 fine sandy loam	Lots 16, 17 (P)
	A2/E	25-34 cm	10YR 5/8 fine sandy loam	none
	A3	34-55 cm	10YR 6/8 fine sandy loam	none
	B1	55-68 cm	10YR 5/8 silty clay loam w/10YR 5/8 and 10YR 6/4 mottling	none
	B/C	68-72 cm	10YR 6/8 loamy sand	none
8	A1/Ap	0-30 cm	10YR 6/4 silt loam	Lot 18 (P)
	A2/E	30-55 cm	10YR 5/8 silt loam w/ manganese staining	none
	C	55 cm +	10YR 6/6 compact silt w/ 10YR 5/8 mottling	none
9	A1/Ap	0-24 cm	10YR 4/4 silt loam	Lot 19 (P)
	A2/E	24-38 cm	10YR 5/6 silt loam	Lot 20 (P)
	B2	38-90 cm	10YR 6/6 heavy silt loam with 10YR 5/8 mottling	none
		90 cm +	Dense cobble layer	
10	A1/Ap	0-30 cm	10YR 4/6 silt loam	Lot 21 (P)
	A2/E	30-45 cm	10YR 4/6 silt loam	none
	B1	45-60 cm	10YR 5/6 sandy loam with 10YR 7/1 mottling and manganese staining	none

Shultz Farm Property - South of Shallow Run

STP	Horizon	Depths	Description	Artifacts
10	B2t	60-95 cm	10YR 6/8 silty clay loam with 10YR 5/1 mottling	none
11	A1	0-18 cm	10YR 5/4 silt loam	none
	Ap	18-35 cm	10YR 5/6 silt loam	none
	IC	35-43 cm	10YR 5/6 fine sandy loam, varved with 10YR 6/4 fine sandy loam	none
	IIC	43-60 cm	10YR 5/8 silt loam with manganese staining	none
	IIIC	60-73 cm	10YR 5/3 silty clay loam with heavy 10YR 5/8 mottling	Lot 22 (P)
	IVAb	73-89 cm	10YR 4/3 clay loam; gleyed	Lots 22, 23 (P)
	IVB/C	89-105 cm	Predominantly 10YR 5/2 sandy clay loam with heavy 10YR 5/8 mottling	none
	IVC	105-115cm	10YR 5/1 very coarse and coarse loamy sand with pebbles and gravel	none
		115 cm +	Gravel bed	
12	A1/Ap	0-23 cm	10YR 5/4 silt loam	Lot 24 (P)
	Apb	23-30 cm	10YR 5/4 silt loam	none
	IC	30-48 cm	10YR 5/4 silt loam, varved with 10YR 6/6 silt loam	none
	IIAb	48-70 cm	10YR 4/3 silt loam	Lot 25 (P)
	IIB2	70-110 cm	10YR 5/1 clay loam with heavy 7.5YR 5/8 mottling	none
	IIIC	110-120cm	10YR 6/1 medium-very coarse sand, gravel, and pebbles	none
		120 cm +	Gravel bed	
13	A1/Ap	0-20 cm	10YR 4/4 silt loam	none
	Apb	20-35 cm	10YR 4/6 silt loam	Lot 26 (P)
	IC	35-50 cm	10YR 5/3 silt loam, slightly gleyed, with manganese staining	Lot 27 (P)
	IIC	50-70 cm	10YR 6/2 silt loam with heavy manganese staining and concretions	none
	B21t	70-95 cm	Predominantly 7.5YR 5/8 clay loam with 10YR 6/1 mottling	none

Shultz Farm Property - South of Shallow Run

STP	Horizon	Depths	Description	Artifacts
13	B21t	95-105 cm	Predominantly 7.5YR 5/8 clay loam with 10YR 6/1 mottling	(auger core)
	B22t	105-120cm	10YR 6/1 silty clay loam	(auger core)
	IIIC	120-125cm	10YR 6/1 fine-medium sand	(auger core)
14	A1/Ap	0-20 cm	10YR 4/3 fine sandy loam	Lot 28 (P)
	A2/E	20-24 cm	10YR 4/4 fine sandy loam	Lot 28 (P)
	Ab	24-32 cm	10YR 5/4 silt loam with manganese staining	none
	B1	32-56 cm	10YR 5/2 silty clay loam w/10YR 5/8 mottling and manganese concretion	none
	B2t	56-78 cm	10YR 5/2 silty clay loam with 7.5YR 5/8 mottling	none
	B3 or B/C	78-100 cm	10YR 5/2 sandy clay loam with 7.5YR 5/8 mottling	none
15	A1/Ap	0-23 cm	10YR 4/4 fine sand loam	none
	A2/E	23-40 cm	10YR 4/6 fine sand loam	none
	IIAb	40-52 cm	10YR 3/6 fine sand loam; gleyed, w/ iron and manganese staining	none
	IIA2/E	52-72 cm	10 YR 5/4 fine sand loam	none
	IIB/C	72-105 cm	10YR 6/6 fine-medium loamy sand	none
16	A1/Ap	0-30 cm	10YR 4/4 fine sand loam	Lots 29, 30 (P)
	Ab	30-45 cm	10YR 3/6 fine sand loan	none
	A2/E	45-72 cm	10YR 4/6 medium sandy loam	none
	B/C	72-98 cm	10YR 5/6 sandy clay loam	none
	C	98 cm +	10YR 6/1 fine sandy loam	none
17	A1/Ap	0-33 cm	10YR 5/4 fine sandy loam	none
	IIAb	33-55 cm	10YR 4/6 fine sandy loam	Lot 31 (P)
	IIA2 or C	55-65 cm	10YR 6/6 fine sandy loam	Lots 31, 32 (P)
	IIIAb	65-82 cm	7.5YR 4/4 loose, loamy sand	Lots 32, 33 (P)
	IVC	82-115 cm	7.5YR 5/8 loose, medium to coarse loamy sand	none

Shultz Farm Property - South of Shallow Run

STP	Horizon	Depths	Description	Artifacts
18	A1	0-7 cm	10YR 5/4 fine sandy loam	Lot 34 (P)
	Ap	7-35 cm	10YR 5/6 fine sandy loam with numerous gravel and pebbles	Lot 35 (P)
	Ab	35-70 cm	10YR 3/4 loose, fine to medium loamy sand with dense gravel, pebbles, cobbles	Lots 36-38 (P)
	A/C	70-85 cm	10YR 4/6 loose, loamy fine sand with dense gravel and pebbles, fewer cobbles	none
19	A1	0-8 cm	10YR 3/4 fine sandy loam	Lot 39 (H)
	Ap	8-20 cm	10YR 4/4 fine sandy loam	Lot 39 (H)
	Ab	20-26 cm	10YR 3/6 fine sandy loam	none
	C	26-50 cm	7.5YR 4/8 loose, coarse loamy sand with very dense gravel, pebbles, cobbles that increase with depth	none
20	A1/Ap	0-25 cm	10YR 4/4 silt loam with few gravel or pebbles	Lot 40 (P)
	Ab	25-35 cm	10YR 3/4 fine sandy loam with dense gravel and pebbles	Lot 41 (P)
	A2	35-60 cm	10YR 4/4 fine to medium sandy loam with dense gravel and pebbles	Lot 42 (P)
	C/B	60-80 cm	7.5YR 5/8 sandy clay loam with dense gravel and pebbles	none
21	A1/Ap	0-32 cm	10YR 5/4 silt loam with gravel and pebbles	Lot 43 (P)
	Ab	32-60 cm	7.5YR 3/4 loose, loamy sand with dense gravel and pebbles	Lot 44 (P)
	C1	60-100 cm	7.5YR 4/4 loose, loamy sand with dense gravel and pebbles	none
	C2	100-110 cm	7.5YR 5/6 loose, fine to medium sand with dense pea gravel	none

Shultz Farm Property - South of Shallow Run

STP	Horizon	Depths	Description	Artifacts
22	A1/Ap	0-22 cm	7.5YR 4/2 fine sandy loam	Lot 45 (P)
	C	22-70	7.5YR 4/4 medium - coarse loamy sand with dense gravel, pebbles, cobbles	Lot 45 (P)
	B/C	70 +	7.5YR 4/6 sandy clay with dense gravel, pebbles, cobbles	none
23	A1/Ap	0-34 cm	10YR 4/4 fine sandy loam	none
	C1	34-42 cm	7.5YR 4/6 medium to coarse loamy sand with pebbles and gravel	none
	C2	42-57 cm	7.5YR 4/4 medium to coarse loamy sand with dense cobbles, pebbles, and gravel	Lot 46 (P)
	C3	57-70 cm	7.5YR 5/8 coarse sand with very dense cobbles, pebbles, and gravel	none
24	A1/Ap	0-28 cm	10YR 4/4 fine sandy loam	none
	Apb	28-50 cm	10YR 4/6 fine sandy loam	none
	IC	50-90 cm	7.5 YR 5/6 medium-course grain sand w/ dense pebbles and gravel	none
	IC/B	90-114 cm	10YR 6/1 sandy clay loam w/pebbles and gravel	none
25	A1	0-13 cm	10YR 5/8 fine sandy loam	Lot 47 (P+H)
	Ap	13-28 cm	10YR 5/4 fine sandy loam	Lot 47 (P+H)
	A2/E	28-45 cm	10YR 5/6 fine sandy loam	none
	IC	45-53 cm	10YR 5/4 silt loam	none
	IIAb	53-64 cm	10YR 3/6 sandy loam	none
	IIB21t	64-85 cm	10YR 4/6 sandy clay loam	none
	IIB22t	85 cm +	10YR 4/6 coarse sandy clay loam	none
26	AO/A1	0-5 cm	10YR 4/4 fine sandy loam	none
	Ap	5-24 cm	10YR 4/4 fine sandy loam	none
	IC	24-54 cm	10YR 4/6 silt loam	none
	IIAb	54-65 cm	10YR 5/3 fine sandy loam w/manganese	none
	IIA2/E	65-80 cm	10YR 5/8 sandy loam	none
	B/C	80-95 cm	7.5YR 5/8 sandy clay loam w/dense pebbles and gravel	none

Shultz Farm Property - South of Shallow Run

STP	Horizon	Depths	Description	Artifacts
27	A1/Ap	0-30 cm	10YR 4/4 fine sandy loam	none
	A2/E	30-38 cm	10YR 4/6 fine sandy loam	none
	A3	38-62 cm	10YR 4/4 fine sandy loam	none
	IIAb	62-75 cm	10YR 3/6 fine sandy loam	none
	IIA2/E or C	75-105 cm	10YR 5/6 loamy sand	none
28	A1/Ap	0-27 cm	10YR 4/4 fine sandy loam	none
	A2 or C	27-65 cm	10YR 4/6 fine sandy loam	none
	IIAb	65-80 cm	10YR 3/4 sandy loam	Lot 48 (P)
	IIC/B	80-105 cm	10YR 5/6 loamy sand	none
29	A1/Ap	0-25 cm	10YR 4/4 fine sandy loam	Lot 49 (P+H)
	Apb	25-35 cm	10YR 3/4 fine sandy loam	Lot 50 (P)
	C/B	35-73 cm	10YR 4/8 medium to coarse sandy loam with increased clay	none
30	A1/Ap	0-19 cm	10YR 4/4 fine sandy loam	Lot 51 (P+H)
	Apb	19-30 cm	10YR 3/4 fine sandy loam	Lot 52 (P)
	C	30-70 cm	7.5YR 4/6 very loose, coarse sand with very dense gravel, pebbles, cobbles	none
31	A1/Ap	0-30 cm	10YR 4/4 silt loam with dense gravel and pebbles	Lot 53 (P)
	Ab	30-50 cm	10YR 4/3 fine sandy loam with dense gravel, pebbles, cobbles	Lot 54 (P)
	C	50-95 cm	10YR 5/8 loose, loamy sand with very dense gravel, pebbles, cobbles	Lots 55, 56 (P)
32	A1/Ap	0-30 cm	10YR 4/4 fine sandy loam	none
	C1	30-50 cm	7.5YR 4/6 medium to coarse loamy sand with pebbles and gravel	none
	C2	50-60 cm	7.5YR 4/4 medium to coarse loamy sand with dense cobbles, pebbles, gravel	none
	C3	60-70 cm	7.5YR 5/8 coarse sand with very dense cobbles, pebbles, and gravel	none

Shultz Farm Property - South of Shallow Run

STP	Horizon	Depths	Description	Artifacts
33	A1	0-8 cm	10YR 4/4 fine sandy loam	Lot 57 (P)
	Ap	8-30 cm	10YR 4/6 fine sandy loam	Lot 58 (P)
	A2/E	30-43 cm	10YR 5/6 fine sandy loam	none
	IC	43-70 cm	Predominantly 10YR 6/4 silt loam with 10YR 4/6 mottling, heavy manganese staining	none
	IIC	70-75 cm	10YR 5/8 medium to coarse sand with very dense cobbles, pebbles, and gravel	none
34	A1	0-18 cm	10YR 4/4 sandy loam	none
	Ap	18-38 cm	10YR 4/6 sandy loam	none
	Ab	38-78 cm	10YR 3/4 fine sandy loam with dense pebbles and gravel, numerous cobbles	Lot 59 (P)
	C	78-95 cm	10YR 5/6 medium to coarse loamy sand with dense pebbles, gravel, fewer cobbles	none
35	A1/Ap	0-19 cm	10YR 4/4 fine sandy loam	none
	A2/E	19-35 cm	10YR 5/6 fine sandy loam	Lot 60 (P)
	A3	35-55 cm	10YR 4/4 fine sandy loam w/cobbles, pebbles, gravel	none
	IIAb	55-70 cm	10YR 3/4 fine sandy loam w/dense cobbles	Lot 61 (P)
	IIA2/E	70-98 cm	10YR 4/6 medium sandy loam w/pea gravel	Lots 62, 63 (P)
36	Ao/A1	0-5 cm	10YR 4/4 fine sandy loam	none
	Ap	5-30 cm	10YR 4/4 fine sandy loam	Lot 64 (P)
	A2/E	30-71 cm	10YR 4/6 fine sandy loam	none
	IIAb	71-90 cm	10YR 3/4 fine sandy loam	Lot 65 (P)
	IIA2	90-105 cm	10YR 3/4 fine sandy loam w/dense pebbles and gravel, some cobbles	Lot 66 (P)
	IIC	105-125cm	10YR 4/6 fine-medium loamy sand	none
37	A1/Ap	0-30 cm	10YR 4/4 fine sandy loam	Lot 67 (P)
	A2 or C	30-45 cm	10YR 4/6 fine sandy loam w/dense pebbles and gravel	none
	IIAb	45-55 cm	10YR 3/4 fine sandy loam	none

Shultz Farm Property - South of Shallow Run

STP	Horizon	Depths	Description	Artifacts
37	IIA2 or IIC	55-65 cm	10YR 4/6 loamy sand	none
	IIC2	65-80 cm	10YR 6/6 loamy sand	none
	IIIC	80-90 cm	10YR varved 10YR 6/6 and 10YR 4/6 fine sand loam	none
	IVC	90 cm +	10YR 4/6 sand loam with manganese staining	none
38	A1	0-10 cm	10YR 4/3 fine sandy loam	Lot 68 (P)
	Ap	10-30 cm	10YR 4/6 fine sandy loam	none
	Apb	30-43 cm	10YR 4/4 fine sandy loam	none
	IIAb	43-49 cm	10YR 4/3 fine sandy loam, dense gravel and pebbles	none
	IIA2/E	49-62 cm	10YR 4/6 fine sandy loam, dense gravel and pebbles	none
	IIA3 or C	62-70 cm	7.5YR 5/8 loose, medium loamy sand with dense gravel and pebbles	none
39	A1	0-15 cm	10YR 3/3 fine sandy loam	none
	Ap	15-40 cm	10YR 5/4 fine sandy loam	none
	Ab	40-70 cm	10YR 3/4 fine sandy loam	Lots 70, 71 (P)
	A2/E	70-88 cm	10YR 6/4 fine sandy loam	Lot 72 (P)
	B/C	88-100 cm	7.5YR 5/8 sandy clay loam	none
40	A1	0-10 cm	10YR 3/3 fine sandy loam	none
	Ap	10-15 cm	10YR 5/4 fine sandy loam	none
	Apb	15-25 cm	10YR 5/6 fine sandy loam	none
	IC	25-35 cm	10YR 6/4 compact, fine loamy sand	none
	IIAp	35-50 cm	10YR 5/4 fine sandy loam few gravel or pebbles	none
	IIC	50-70 cm	10YR 5/4 fine sandy loam with pockets of 10YR 6/6 silt, few gravel or pebbles	none
	IIIAb	70-97 cm	10YR 4/4 fine sandy loam few gravel or pebbles	Lot 73 (P)
	IIIA2/E	97-115 cm	10YR 6/3 fine sandy loam few gravel or pebbles	none
	C/B	115-142 cm	10YR 6/8 very compact fine sandy loam, few gravel or pebbles	none

Shultz Farm Property - South of Shallow Run

STP	Horizon	Depths	Description	Artifacts
41	A1	0-9 cm	10YR 3/3 fine sandy loam few gravel or pebbles	Lot 74 (H)
	Ap	9-20 cm	10YR 6/6 fine sandy loam few gravel or pebbles	Lot 74 (H)
	IIA _p b	20-35 cm	10YR 5/4 fine sandy loam few gravel or pebbles	none
	IIIA _p b	35-40 cm	10YR 5/6 fine sandy loam few gravel or pebbles	none
	IVC	40-45 cm	10YR 4/6 loose, loamy sand few gravel or pebbles	none
	VAb or VC	45-68 cm	10YR 5/6 fine sandy loam few gravel or pebbles	Lot 75 (P)
	VIAb	68-97 cm	10YR 5/3 very fine sandy loam with moderately dense gravel, pebbles, cobbles	Lots 76, 77 (P)
	A/B	97-110 cm	10YR 5/8 very compact loamy fine to medium sand	none
42	A1	0-10 cm	10YR 3/4 fine sandy loam few gravel or pebbles	none
	Ap	10-25 cm	10YR 4/6 fine sandy loam few gravel or pebbles	none
	A _p b	25-45 cm	10YR 4/6 fine sandy loam few gravel or pebbles	none
	A2/E or 1C	45-50 cm	10YR 5/4 loose, loamy sand few gravel or pebbles	Lot 78 (P)
	IIA _b or IIA _p b	50-70 cm	10YR 3/6 fine sandy loam few gravel or pebbles	none
	IIA2/E or IIC	70-75 cm	10YR 5/4 loose, loamy sand few gravel or pebbles	Lot 79 (P)
	IIIA _b	75-95 cm	10YR 3/4 fine sandy loam few gravel or pebbles	Lot 79 (P)
	C/B	95-112 cm	10YR 5/6 loose, loamy fine to medium sand with few gravel or pebbles	none
43	A1/A _p	0-20 cm	10YR 4/4 fine sandy loam, dense gravel and pebbles	Lot 80 (P+H)
	A _p b	20-45 cm	10YR 4/6 fine sandy loam few gravel and pebbles	Lot 81 (H)
	IIA _b	45-70 cm	10YR 3/4 fine sandy loam with moderately dense gravel and pebbles	none
	B1	70-85 cm	10YR 5/8 sandy clay loam, dense gravel and pebbles	none

Shultz Farm Property - South of Shallow Run

STP	Horizon	Depths	Description	Artifacts
44	A1/Ap	0-25 cm	10YR 4/4 fine sandy loam	Lot 82 (H)
	Apb	25-40 cm	10YR 4/6 fine sandy loam	Lot 83 (H)
	IIAb	40-65 cm	10YR 3/6 fine sandy loam	none
	IIC	65-80 cm	w/dense gravel and pebbles 7.5YR 4/6 loose, loamy sand with dense gravel and pebbles	none
45	A1/Ap	0-30 cm	10YR 4/4 fine sandy loam	Lot 84 (H)
			very few gravel or pebbles	
	A2/E	30-45 cm	10YR 4/6 fine sandy loam, few gravel and pebbles	none
	IIAb	45-55	10YR 3/6 fine sandy loam with dense gravel, pebbles and cobbles	Lots 85, 86 (P)
	C1	55-80 cm	7.5YR 4/6 loamy sand with dense gravel, pebbles, few cobbles	none
46	A1/Ap	0-25 cm	10YR 4/6 fine sandy loam	Lot 87 (P+H)
	IIApb	25-38 cm	10YR 5/6 fine sandy loam	Lot 88 (P+H)
	Ab	38-60 cm	10YR 4/3 fine sandy loam with very dense gravel, pebbles, few cobbles	Lot 89 (P)
	C	60-97 cm	7.5YR 4/6 loose loamy sand with very dense gravel, pebbles, few cobbles	none
47	A1	0-8 cm	10YR 4/4 fine sandy loam	none
	Ap	8-35 cm	10YR 4/6 fine sandy loam	none
	C	35-90 cm	7.5YR 4/6 medium to coarse sand with very dense pebbles and gravel	none
48	A1/Ap	0-30 cm	10YR 4/4 fine sandy loam	none
	Apb	30-40 cm	10YR 4/6 fine sandy loam	none
	C	40-70 cm	10YR 5/6 fine sandy loam with very dense cobbles, pebbles, gravel	none
49	A1	0-15 cm	10YR 4/4 sandy loam	none
	Ap	15-35 cm	10YR 5/6 sandy loam	none
	IC	35-50 cm	10YR 5/8 silt loam	none
	IIC	50-55 cm	10YR 4/6 sandy loam	none

Shultz Farm Property - South of Shallow Run

STP	Horizon	Depths	Description	Artifacts
49	IIIC	55-74 cm	7.5YR 4/6 sandy loam	none
	IVAb	74-95 cm	10YR 4/4 silt loam with pebbles and gravel	none
	IVA2b	95-125cm	10YR 3/4 sandy loam with pebbles and gravel	Lots 90-92 (P)
	IVA3b or A/C	125-150cm	10YR 4/6 fine loamy sand with pea gravel	none
50	A1/Ap	0-20 cm	10YR 5/4 fine sandy loam	none
	A2/E	22-40 cm	10YR 4/6 fine sandy loam	none
	A3	40-60 cm	10YR 4/4 fine sandy loam	none
	IIAb	60-80 cm	10YR 3/4 fine sandy loam	Lot 93 (P)
	IIA2 or C	80-150 cm	10YR 4/6 fine sandy loam	none
51	A1/Ap	0-23 cm	10YR 4/4 fine sandy loam	none
	A2/E	23-60 cm	10YR 4/6 fine-medium sandy loam	Lots 94, 95 (P)
	A3	60-90 cm	10YR 4/6 fine sandy loam	Lot 96 (P)
	IIAb	90-100 cm	10YR 3/4 fine sandy loam	none
	IIA2	100-130cm	10YR 4/6 fine-medium sandy loam	none
	B1	130-140cm	10YR 5/8 sandy clay loam	none
52	A1/Ap	0-25 cm	10YR 4/4 fine sandy loam w/dense pebbles and gravel	Lot 97 (P)
	A2/E or C	25-35 cm	10YR 6/6 fine sandy loam w/dense pebbles and gravel	none
	IIAb	35-45 cm	10YR 4/6 fine sandy loam w/dense pebbles and gravel	Lot 98 (P)
	IIA2 or IIC	45-50 cm	10YR 5/6 fine-medium sand w/pebbles and gravel	none
	IIIAb	50-78 cm	10YR 4/4 fine sandy loam	none
	IIIA2	78-100 cm	10YR 4/4 fine-medium sand loam	none
	IIIC	100 cm +	dense gravel and pebbles	none
53	A1/Ap	0-25 cm	10YR 4/4 fine sandy loam	Lot 99 (P+H)
	Apb	25-52 cm	10YR 4/6 fine sandy loam	Lot 100 (P+H)
	IIApb	52-62 cm	10YR 3/4 fine sandy loam	Lot 101 (H)
	C/B	62-82 cm	10YR 5/8 sandy clay loam	none

Shultz Farm Property - South of Shallow Run

STP	Horizon	Depths	Description	Artifacts
54	A1/Ap	0-30 cm	10YR 4/4 fine sandy loam	Lot 102 (H)
	Apb	30-55 cm	10YR 4/6 fine sandy loam	none
	IIAb	55-90 cm	10YR 4/4 fine sandy loam	none
	B1	90-100 cm	10YR 5/8 sandy clay loam	none
55	A1/Ap	0-20 cm	10YR 4/4 fine sandy loam, dense gravel and pebbles	Lot 103 (P+H)
	Fill	20-50 cm	7.5YR 4/6 loose, medium to coarse sand with dense gravel and pebbles	Lot 104 (H)
	Apb	50-65 cm	10YR 4/4 fine sandy loam few gravel and pebbles	none
	IIAb	65-80 cm	10YR 3/3 fine sandy loam, few gravel and pebbles	none
	C/B	80-95 cm	10YR 5/6 sandy clay loam with few gravel and pebbles	none
56	A1/Ap	0-30 cm	10YR 4/3 fine sandy loam	Lot 105 (H)
	C	30-38 cm	10YR 4/6 fine sandy loam	none
	Apb	38-60 cm	10YR 4/4 fine sandy loam with pockets of 10YR 5/4 silt loam	Lot 106 (H)
	A2/E	60-85 cm	10YR 5/4 fine sandy loam	none
	B1	85-100 cm	10YR 5/8 fine sandy loam with increased clay	none
57	A1/Ap	0-28 cm	10YR 4/4 fine sandy loam	none
	A2/E	28-50 cm	10YR 4/6 fine sandy loam	none
	B/C	50-80 cm	10YR 5/8 sandy clay loam	none
	C	80 cm +	10YR 5/8 medium sand with dense pebbles and gravel	none
58	A1/Ap	0-25 cm	10YR 4/4 fine sandy loam	none
	Apb	25-45	10YR 3/4 fine sandy loam	none
	B/C	45-75 cm	10YR 5/8 sandy clay loam with pebbles and gravel	none
	C/B	75-120 cm	10YR 5/6 sandy clay loam with very dense pebbles and gravel	none
59	A1	0-15 cm	10YR 4/3 fine sandy loam	none
	Ap	15-30 cm	7.5YR 4/6 fine sandy loam	none
	A2/E	30-62 cm	10YR 4/6 fine sandy loam	none
	IIAb	62-80 cm	10YR 4/4 fine sandy loam	none
	IIB/C	80-105 cm	7.5 YR sandy clay loam	none

Shultz Farm Property - South of Shallow Run

STP	Horizon	Depths	Description	Artifacts
60	A1/Ap	0-22 cm	10YR 4/4 fine sandy loam	none
	A2	22-34 cm	10YR 4/6 fine sandy loam	none
	A3	34-67 cm	10YR 4/4 fine sandy loam	none
	IIAb	67-85 cm	10YR 3/4 fine sandy loam	none
	IIA2	85-118 cm	10YR 5/8 sandy loam	none
	or A/B			
	IIIAb	118-135cm	10YR 3/4 silt loam with dense cobbles, pebbles and gravel	none
	IIIC	135-160cm	7.5 YR 6/8 loamy sand with dense cobbles, pebbles and gravel	none
61	A1/Ap	0-30 cm	10YR 5/6 fine sandy loam	none
	A2/E	30-40 cm	10YR 4/6 fine sandy loam	none
	IIAb	40-60 cm	10YR 4/4 fine sandy loam	none
	IIA2/E	60-80 cm	10YR 4/6 fine sandy loam	none
	C/B	80-90 cm	7.5YR 5/8 loamy medium sand with dense pea gravel	none
62	A1/Ap	0-17 cm	10YR 4/4 fine sandy loam w/dense pebbles and gravel	none
	C	17 cm +	7.5YR 5/8 loamy sand with dense pebbles and gravel (too dense to excavate)	none
63	A1/Ap	0-20 cm	10YR 5/8 fine sandy loam	Lot 107 (H)
	B21t	20-30 cm	10YR 6/6 sandy clay loam with 10YR 7/1 mottling	none
	B22t	30-40 cm	7.5YR 5/6 sandy clay loam with 10YR 7/1 mottling	none
64	A1/Ap	0-20 cm	10YR 4/4 fine sandy loam	none
	B22t	20-30 cm	10YR 5/8 sandy clay loam	none
65	AO/A1	0-11 cm	10YR 4/4 fine sandy loam	Lots 108, 109 (H)
	B21t	11-29 cm	10YR 6/6 sandy clay loam with 10YR 7/1 mottling	none
	B22t	29 cm +	7.5 YR 5/6 sandy clay loam with 10YR 7/1 mottling	none
66	A1	0-17 cm	10YR 3/2 fine sandy loam	none
	Ap	17-38 cm	10YR 4/6 fine sandy loam with dense pebbles and cobbles	Lot 110 (P)

Shultz Farm Property - South of Shallow Run

STP	Horizon	Depths	Description	Artifacts
66	B21t	38-68 cm	10YR 6/6 sandy clay loam with 10YR 7/1 mottling, no gravel or pebbles	none
	B22t	68-75 cm	7.5YR 5/6 sandy clay loam with 10YR 7/1 mottling, no gravel or pebbles	none
67	A1/Ap	0-11 cm	10YR 4/3 fine sandy loam	none
	A2/E	11-20 cm	10YR 5/6 fine sandy loam	none
	B21 (Cambic)	20-38 cm	10YR 6/6 fine sandy loam with 10YR 7/1 mottling	none
	B22t	38-45 cm	10YR 5/8 sandy clay loam with 10YR 7/1 mottling	none
68	A1	0-6 cm	10YR 3/3 fine sandy loam	none
	Ap	6-19 cm	10YR 5/3 fine sandy loam	none
	B22t	19-30 cm	10YR 6/8 sandy clay loam with 10YR 7/1 mottling	none
69	A1/Ap	0-15 cm	10YR 4/4 fine sandy loam	none
	Apb	15-27 cm	10YR 6/4 fine sandy loam	none
	IC	27-37 cm	predominantly 7.5YR 5/6 sandy loam with pockets of 10YR 6/6 and 5YR 5/8 sandy loam (colluvial)	none
	IIAb	37-47 cm	7.5 YR 4/6 fine-medium	none
	IIB1	47-60 cm	7.5 YR 5/6 sandy clay loam	none
70	A1/Ap	0-20 cm	10YR 4/4 fine sandy loam	Lot 111 (H)
	IC or Fill	20-40 cm	10YR 5/8 loose, medium to coarse loamy sand with dense gravel and pebbles	Lot 112 (H)
	IIC	40-60 cm	7.5YR 5/8 loose, fine to medium loamy sand, few gravel and pebbles	none
71	A1/Ap	0-17 cm	10YR 3/4 fine sandy loam	Lot 113 (H)
	Apb	17-27 cm	10YR 4/4 fine sandy loam	Lot 114 (P)
	B1	27-55 cm	10YR 5/8 sandy loam with slight clay content, no gravel or pebbles	none
	C	55-85 cm	7.5YR 5/8 fine sandy loam few gravel and pebbles	none

Shultz Farm Property - South of Shallow Run

STP	Horizon	Depths	Description	Artifacts
72	A1/Ap	0-23 cm	10YR 4/4 silt loam	none
	B21t	23-40 cm	10YR 5/6 silty clay loam	none
	B22t	40-61 cm	10YR 5/8 silty clay loam	none
73	A1/Ap	0-29 cm	10YR 4/4 silt loam, no gravel or pebbles	none
	Apb	29-45 cm	10YR 3/4 silt loam no gravel or pebbles	none
	B21t	45-65 cm	10YR 6/6 silty clay loam no gravel or pebbles	none
	B22t	65 cm +	10YR 5/8 silty clay loam	none
74	A1/Ap	0-22 cm	10YR 3/6 fine sandy loam few gravel or pebbles	Lot 115 (H)
	C	22-36 cm	10YR 4/6 fine to medium loamy sand, few gravel or pebbles	none
	Ab	36-62 cm	10YR 4/4 fine to medium loamy sand with very dense gravel and pebbles	none
	IIC	62-67 cm	7.5YR 5/8 medium to coarse loamy sand with very dense gravel and pebbles	none
75	A1/Ap	0-20 cm	7.5YR 4/4 fine sandy loam	Lot 116 (P+H)
	B21t	20-35 cm	7.5YR 4/6 sandy clay loam	none
	B22t	35-50 cm	7.5YR 5/8 sandy clay loam	none
	B3	50-65 cm	5.5YR 5/8 fine sandy loam	none
	(Cambic) C1	65-90 CM	varved 7.5YR 5/6 and 10YR 6/8 fine sandy loam with heave 10YR 5/8 mottling	none
	C2	90 cm +	very dense layer of gravel, pebbles, cobbles	
76	A1/Ap	0-25 cm	10YR 4/4 fine sandy loam	none
	B21t	25-35 cm	10YR 4/6 sandy clay loam	none
	B22t	35-42 cm	7.5YR 5/6 sandy clay loam	none
77	A1/Ap	0-22 cm	10YR 4/6 fine sandy loam no gravel or pebbles	Lot 117 (P+H)
	C	22-40 cm	10YR 4/4 fine sandy loam with lenses of 10YR 6/4 fine sandy loam, no gravel or pebbles	none

Shultz Farm Property - South of Shallow Run

STP	Horizon	Depths	Description	Artifacts
77	Ab	40-55 cm	10YR 3/4 fine sandy loam no gravel or pebbles	none
	B21t	55-75 cm	10YR 6/6 sandy clay loam no gravel or pebbles	none
	B22t	75-85 cm	10YR 6/8 sandy clay loam no gravel or pebbles	none
78	A1/Ap	0-25 cm	10YR 4/3 fine sandy loam	Lot 118 (P)
	Ab	25-47 cm	10YR 3/4 fine sandy loam w/dense gravel and pebbles	none
	B22t	47-60 cm	10YR 5/8 sandy clay loam	none
79	A1/Ap	0-25 cm	10YR 3/4 fine sandy loam	Lots 119, 120 (P+H)
	B21t	25-40 cm	7.5YR 5/8 sandy clay loam	none
	B22t	40-55 cm	7.5YR 4/6 silty clay loam with 10YR 7/6 mottling	none
80	A1/Ap	0-24 cm	10YR 4/4 fine sandy loam	Lot 121 (P+H)
	B21t	24-48 cm	7.5YR 4/6 sandy clay loam	none
	B22t	48 cm +	7.5YR 5/6 sandy clay loam	none
81	A1/Ap	0-25 cm	10YR 4/4 fine sandy loam	Lot 122 (P+H)
	B22t	25-50 cm	10YR 6/8 silty clay loam	none
82	A1/Ap	0-30 cm	10YR 4/3 fine sandy loam	Lot 123 (P+H)
	Ab	30-50 cm	10YR 3/4 fine sandy loam with dense gravel and pebbles	none
	B22t	50-72 cm	10YR 5/8 sandy clay loam	none
83	A1/Ap	0-22 cm	10YR 4/4 silt loam	Lot 124 (P)
	B22t	22-40 cm	10YR 5/8 silty clay loam	none
84	A1	0-10 cm	10YR 4/4 fine sandy loam	Lot 125 (H)
	C	10-20 cm	10YR 5/8 coarse sand with dense gravel and pebbles	none

Shultz Farm Property - South of Shallow Run

STP	Horizon	Depths	Description	Artifacts
85	A1/Ap	0-28 cm	10YR 4/4 fine sandy loam	Lot 126 (P+H)
	B22t	28-40 cm	10YR 5/8 sandy clay loam	none
86	A1/Ap	0-17 cm	10YR 4/4 fine sandy loam	Lot 127 (P+H)
	B22t	17-35 cm	10YR 5/8 sandy clay loam	none
87	A1/Ap	0-30 cm	10YR 4/4 fine sandy loam	Lot 128 (P+H)
	Ab	30-55 cm	10YR 4/3 fine sandy loam with moderately dense gravel and pebbles	none
	B22t	55-70 cm	10YR 5/8 sandy clay loam with moderately dense gravel and pebbles	none
88	A1/Ap	0-27 cm	10YR 4/4 silt loam	Lot 129 (P+H)
	B21t	27-40 cm	10YR 5/6 silty clay loam	none
	B22t	40-58 cm	10YR 6/8 silty clay loam	none
89	A1/Ap	0-20 cm	10YR 4/4 fine sandy loam	none
	C (Co-luvial)	20-33 cm	10YR 5/8 coarse sand with dense gravel and pebbles	Lot 130 (H)
	B22t	33 cm +	10YR 5/8 sandy clay loam	none
90	A1	0-15 cm	10YR 3/4 fine sandy loam	Lot 131 (H)
	Fill	15-40 cm	predominantly 10YR 5/8 clay loam mixed with 10YR 4/4 and 7.5YR 5/8 silt loam	none

Shultz Farm Property - North of Shallow Run

STP	Horizon	Depths	Description	Artifacts
1	A1	0-15 cm	10YR 3/4 loose fine sand	no
	IC	15-30 cm	10YR 6/4 loose fine sand	no
	IIC	30-45 cm	10YR 5/1 silt loam; gleyed; iron and manganese staining	no
	IIIAb	45-58 cm	10YR 4/6 fine sandy loam	no
	IIIA2	58-70 cm	10YR 5/6 fine sandy loam	no
	IIIC	70 cm +	10YR 5/6 loose fine to medium sand with very dense pebbles and gravel, a few cobbles	no
2	A1/Ap	0-30 cm	10YR 4/4 fine sandy loam	no
	IC	30-60 cm	10YR 4/6 fine sandy loam	no
	IIC	60-80 cm	10YR 6/6 loose fine sand	no
	IIIC	80-117 cm	10YR 4/6 very loose fine sand with dense pebbles and gravel	no
3	A1/Ap	0-26 cm	10YR 4/4 fine sandy loam	no
	B2t	26-70 cm	Predominantly 2.5YR 6/8 sandy clay loam with pockets of 2.5YR 4/8 and 10YR 7/4 clay	no
4	A1/Ap	0-26 cm	10YR 4/4 fine sandy loam	no
	IC	26-60 cm	10YR 4/6 fine sandy loam; slightly gleyed; iron and manganese staining	no
	IIC	60-105 cm	10YR 6/4 loose, fine to medium sand with dense pebbles and gravel	no
5	A1/Ap	0-34 cm	10YR 4/4 sand loam with 7.5YR 5/8 mottling; gleyed	no
	IC	34-60 cm	10YR 3/6 compact fine sandy loam with iron and manganese staining	no
	IIC	60-70 cm	10YR 6/6 loose fine sand	no
	IIIC	70-100 cm	10YR 3/6 fine sandy loam with charcoal flecks	no
	IVC	100-110 cm	Mixed 10YR 5/6 and 5YR 3/2 loose medium to coarse sand; dense pebbles and gravel, some cobbles	no
	VC	110-129 cm	7.5YR 4/6 coarse to very coarse sand with very dense pebbles, gravel, and cobbles	no

Schultz Farm Property - North of Shallow Run

STP	Horizon	Depths	Description	Artifacts
6	A1	0-15 cm	10YR 4/4 fine sand loam	no
	Fill	15-25 cm	Very compact 5YR 4/6 sandy loam with pea gravel and pebbles	no
	IC	25-60 cm	10YR 5/3 fine sandy loam; gleyed; iron and manganese staining	no
	IIC	60-75 cm	10YR 4/3 fine sandy loam w/dense pebbles and gravel	no
7	A1	0-10 cm	10YR 4/4 fine sandy loam	no
	IC	10-15 cm	10YR 4/6 loose loamy sand	no
	IIC	15-65 cm	10YR 5/3 silt loam with 5YR 5/8 mottling; gleyed	no
	IIIC	65-80 cm	10YR 5/6 loose medium sand	no
	B1	80-90 cm	10YR 5/1 silty clay loam w/10YR 5/8 mottling; gleyed	no
8	A1/Ap	0-38 cm	10YR 3/2 silt loam; gleyed	no
	B1	38-60 cm	10YR 5/1 silty clay loam w/10YR 6/8 mottling; gleyed	no
	B2t	60 cm +	10YR 4/1 silty clay loam with 10YR 6/8 mottling	no
9	A1/Ap	0-20 cm	10YR 4/4 fine sandy loam	no
	B1	20-32 cm	Predominantly 10YR 5/4 silty clay loam with 7.5YR 4/4 mottling; manganese staining	no
	B2t	32-50 cm	Predominantly 10YR 6/2 silty clay loam with 10YR 5/6 and 7.5YR 4/6 mottling	no
10	A1/Ap	0-32 cm	10YR 4/4 silt loam; gleyed	no
	B2t	32-43 cm	10YR 5/6 silty clay loam with 7.5YR 5/8 mottling	no
11	A1/Ap	0-30 cm	10YR 4/4 fine sandy loam	no
	IC	30-55 cm	10YR 4/6 loose loamy sand	no
	IIC	55-80 cm	10YR 5/4 loose medium sand with dense pea gravel	no
	IIIC	80-95 cm	10YR 4/6 loose medium to coarse sand with cobbles, pebbles, and gravel	no
	IVC	95-110 cm	10YR 6/4 loose coarse sand with cobbles, pebbles, and gravel	no

Schultz Farm Property - North of Shallow Run

STP	Horizon	Depths	Description	Artifacts
12	A1/Ap	0-32 cm	10YR 4/4 silt loam	Lot 1
	B1	32-60 cm	10YR 5/1 silty clay loam with 7.5YR 5/8 mottling; gleyed	no
	B2t	60 cm +	Predominantly 7.5YR 5/8 silty clay loam with 10YR 5/1 mottling	no
13	A1/Ap	0-25 cm	10YR 4/4 silt loam; gleyed	no
	B2t	25-35 cm	10YR 5/6 silty clay loam with 7.5YR 5/8 mottling	no
14	A1/Ap	0-14 cm	10YR 4/4 silt loam; gleyed	no
	B2t	14-34 cm	10YR 5/6 silty clay loam with 7.5YR 5/8 mottling	no
15	A1/Ap	0-20 cm	10YR 3/6 fine sandy loam	no
	Apb	20-30 cm	10YR 4/6 fine sandy loam	Lot 2
	Ab	30-47 cm	7.5YR 3/4 fine sandy loam	no
	B1	47-85 cm	7.5YR 4/4 sandy clay loam	no
	B2t	85-100 cm	10YR 6/6 silty clay loam with 10YR 5/8 mottling and manganese staining	no
16	A1/Ap	0-18 cm	10YR 4/4 fine sandy loam	no
	B1	18-35 cm	10YR 5/8 sandy clay loam w/dense pebbles and gravel	no
17	A1	0-10 cm	10YR 4/4 fine sandy loam	no
	B2	10-20 cm	Mixed 2.5YR 4/8, 7.5YR 6/8, and 10YR 8/1 clay	no
18	A1/Ap	0-30 cm	10YR 4/4 silt loam; gleyed	no
	B1	30-40 cm	10YR 5/8 silty clay loam; gleyed	no
	B2t	40-55 cm	10YR 5/1 silty clay loam; gleyed	no
19	A1/Ap	0-28 cm	10YR 4/4 silt loam; gleyed	Lot 3
	B2t	28-50 cm	10YR 5/3 silty clay loam; gleyed	no
20	A1	0-10 cm	10YR 3/4 silt loam	no
	Ap	10-22 cm	10YR 4/4 silt loam	no
	A2/E	22-35 cm	10YR 5/6 silt loam	no
	B1	35-45 cm	10YR 5/8 silty clay loam	no
	B2t	45-55 cm	10YR 6/6 silty clay loam with 10YR 5/8 mottling	no

Schultz Farm Property - North of Shallow Run

STP	Horizon	Depths	Description	Artifacts
21	AO/Ap	0-12 cm	10YR 2/2 medium sandy loam	no
	C1	12-24 cm	7.5YR 4/6 fine to medium sandy loam with dense pebbles and gravel	no
	C2	24-34 cm	2.5YR 3/6 coarse sand and pea gravel, a few cobbles	no
22	AO/Ap	0-25 cm	10YR 2/2 medium sandy loam	no
	C1	25-40 cm	7.5YR 4/6 fine to medium sand with dense pea gravel and pebbles	no
	C2	40-60 cm	2.5YR 3/6 coarse sand and pea gravel, a few pebbles	no
23	A1/Ap	0-30 cm	10YR 3/4 fine sand loam	no
	A2/E	30-40 cm	7.5YR 4/6 fine sandy loam	no
	B1	40-65 cm	10YR 5/8 compact, heavy sand loam	no
24	A1	0-8 cm	10YR 4/4 fine sandy loam	no
	B2	8-20 cm	Mixed 2.5YR 4/8, 7.5YR 6/8, and 10YR 8/1 clay	no
25	A1/Ap	0-30 cm	10YR 4/4 silt loam	Lot 4
	B1	30-50 cm	10YR 4/6 silty clay loam	no
26	A1/Ap	0-25 cm	10YR 4/4 silt loam; gleyed	no
	B2t	25-35 cm	10YR 5/8 silty clay loam with manganese staining	no
27	A1	0-12 cm	10YR 4/4 fine sandy loam	no
	Fill	12-20 cm	7.5YR 5/8 clay loam	no
	Ap	20-32 cm	10YR 4/6 fine sandy loam	no
	B1	32-45 cm	10YR 5/8 sandy clay loam	no
28	A1/Ap	0-25 cm	7.5YR 3/4 fine sandy loam	Lot 5
	A2/E	25-35 cm	7.5YR 4/4 loamy fine sand	no
	C1	35-52 cm	7.5YR 4/6 medium to coarse loamy sand with pea gravel and ironstone	no
	B/C	52+ cm	7.5YR 5/8 sandy clay loam with dense gravel	no
29	A1/Ap	0-20 cm	10YR 4/4 fine sandy loam	no
	B/C	20-30 cm	7.5YR 5/8 sandy clay loam with dense pebbles and gravel	no

Schultz Farm Property - North of Shallow Run

STP	Horizon	Depths	Description	Artifacts
30	A1	0-8 cm	10YR 4/4 fine sandy loam	no
	B2	8+ cm	Mixed 2.5YR 4/8, 7.5YR 6/8, and 10YR 8/1 clay	no
31	A1/Ap	0-30 cm	10YR 4/4 silty clay loam	no
	B2	30-40 cm	10YR 5/8 silty clay loam	no
32	A1/Ap	0-25 cm	10YR 4/4 silt loam	no
	Apb	25-45 cm	10YR 3/4 silt loam	no
	B2	45-60 cm	10YR 5/8 silty clay loam	no
33	A1/Ap	0-25 cm	5YR 3/2 fine sandy loam	no
	B/C	25-45 cm	5YR 4/6 loamy medium sand	no
34	AO/A1	0-10 cm	10YR 3/2 fine sandy loam	no
	Fill	10-25 cm	Mixed 7.5YR 5/8 clay with pockets of 7.5YR 4/6 sandy clay loam, asphalt chunks and road gravel	no
	Apb	25-40 cm	10YR 4/4 fine sandy loam; gleyed	no
	B2t	40-50 cm	7.5YR 4/8 sandy clay loam with dense pebbles and cobbles	no
35	AO/A1	0-12 cm	7.5YR 3/4 fine sandy loam	no
	Ap	12-32 cm	7.5YR 4/2 silt loam; gleyed	no
	B/C	32-45 cm	7.5YR 4/6 loamy sand with pebbles and gravel	no
36	AO/A1	0-10 cm	10YR 4/4 fine sandy loam	no
	Ap	10-30 cm	10YR 4/6 fine sandy loam	no
	C/B	30-43 cm	7.5YR 5/8 loamy sand	no
37	A1/Ap	0-24 cm	7.5YR 3/4 fine sandy loam	no
	A2/E	24-44 cm	7.5YR 4/6 fine sandy loam	Lot 6
	B1	44-62 cm	10YR 5/4 sandy clay loam	Lot 6
38	A1/Ap	0-25 cm	10YR 3/4 silt loam	Lot 7
	B2t	25-35 cm	7.5YR 5/8 clay loam	no
39	A1/Ap	0-25 cm	7.5YR 3/4 fine sandy loam	Lot 8
	B1	25-37 cm	7.5YR 4/6 silty clay loam	no
40	A1/Ap	0-20 cm	10YR 3/4 silt loam	Lots 9, 10
	Apb	20-35 cm	10YR 3/6 silt loam	Lots 11, 12
	B1	35-60 cm	7.5YR 4/6 silty clay loam	Lot 13

Schultz Farm Property - North of Shallow Run

STP	Horizon	Depths	Description	Artifacts
41	A1/Ap A2/E B1	0-30 cm 30-45 cm 45 cm +	7.5YR 3/4 fine sandy loam 7.5YR 4/6 fine sandy loam 10YR 5/4 sandy clay loam	Lot 14 no no
42	A1/Ap	0-30 cm	7.5YR 3/4 fine sandy loam Further excavation prevented by water	Lot 15
43	A1/Ap B2t	0-30 cm 30-40 cm	7.5YR 3/4 fine sandy loam 7.5YR 4/6 silty clay loam	no no
44	A1/Ap B2t	0-30 cm 30-50 cm	7.5YR 3/4 silt loam 7.5YR 4/6 silty clay loam	no no
45	A1/Ap B2t	0-30 cm 30-50 cm	10YR 4/4 fine sandy loam 10YR 5/8 sandy clay loam	Lot 16 no
46	A1/Ap B2t	0-33 cm 33-43 cm	7.5YR 4/4 silt loam 7.5YR 4/6 silty clay loam	no no
47	A1/Ap C Apb B2t	0-20 cm 20-30 cm 30-45 cm 45 cm +	7.5YR 3/4 fine sandy loam 7.5YR 4/4 loamy sand (Colluvial material) 7.5YR 3/4 loamy sand 5YR 5/6 sandy clay loam	no no no no
48	A1/Ap B1	0-35 cm 35-45 cm	10YR 3/4 fine sandy loam 10YR 3/6 sandy clay loam; very gleyed	Lot 17 no
49	A1/Ap B2t	0-27 cm 27-38 cm	10YR 4/4 fine sand loam Mixed 2.5YR 4/8, 7.5YR 6/8, and 10YR 8/1 clay	no no

Beehive Property

STP	Horizon	Depths	Description	Artifacts
1	A1/Ap	0-32 cm	10 YR 4/4 fine sandy loam	no
	C	32-90 cm	10 YR 4/6 silt loam w/ iron & manganese staining	no
2	A1/Ap	0-32 cm	10YR 3/4 silt loam	no
	IC	32-80 cm	10YR 6/4 silt loam; slightly gleyed, iron and manganese staining	no
	IIAb	80-90 cm	10YR 4/4 silt loam; slightly gleyed, iron and manganese staining	Lot 1
	IIC	90-117 cm	10YR 6/4 silt loam	no
3	IC	0-8 cm	10YR 5/8 clay	no
	Apb	8-29 cm	10YR 3/4 silt loam	(H)
	Apb	29-56 cm	10YR 5/3 silt loam; slightly gleyed, iron and manganese staining	no
	IIC	56-98 cm	10YR 5/3 loamy sand; gleyed, iron and manganese staining	no
4	AO/A1	0-15 cm	10YR 3/4 silt loam	no
	Ap	15-30 cm	10YR silt loam; gleyed, slight iron and manganese staining	no
	IC	30-57 cm	10YR 6/4 silt loam	Lot 2, (H)
	IIAb	57-70 cm	10YR 5/3 silt loam; gleyed, iron and manganese staining	Lot 3
	IIB1	70-75 cm	10YR 5/6 silt loam	no
	IIB2	75-90 cm	10YR 5/8 silty clay loam	no
5	A1/Ap	0-22 cm	10YR 4/3 silt loam	Lot 4
	Apb	22-33 cm	10YR 4/2 silt loam	Lot 5
	C	33-49 cm	10YR 5/4 silt loam with manganese staining	no
	B1	49-61 cm	10YR 5/8 silt loam	no
6	A1/Ap	0-30 cm	10YR 4/3 silt loam	Lot 6
	C	30-60 cm	10YR 4/4 silt loam	no
	B1	60-70 cm	10YR 5/6 silty clay loam	no

Beehive Property

STP	Horizon	Depths	Description	Artifacts
7	A1/Ap	0-23 cm	10YR 4/3 silt loam; gleyed	Lot 7, (H)
	Apb	23-44 cm	10YR 5/4 silt loam with manganese staining	no
	A2/E	44-51 cm	10YR 6/6 silt loam	no
	C	51-65 cm	10YR 5/4 sandy loam	no
	C/B	65-90 cm	10YR 5/4 sandy clay loam with dense rounded pebbles, gravel, some cobbles	Lot 8
8	A1/Ap	0-30 cm	10YR 4/3 silt loam, gleyed	Lot 9, (H)
	B2t	30-51 cm	10YR 6/8 silty clay loam	no
	C	51-70 cm	10YR 5/8 very compact loamy sand w/pockets of 10YR 7/1 silty clay	no
9	A1/AP	0-25 cm	10YR 4/4 silt loam	Lot 10, (H)
	C	25-60 cm	10YR 3/6 silt loam	no
	C/B	60-70 cm	10YR 5/8 loamy sand with pockets of 10YR 7/2 clay	no
10	A1/Ap	0-22 cm	10YR 4/4 silt loam	(H)
	C	22-50 cm	10YR 5/8 loamy sand; pebbles and gravel increase w/depth; bottoms on cobble layer	no
11	A1/Ap	0-30 cm	10YR 4/4 silt loam	Lot 11, (H)
	A2/E	30-50 cm	10YR 6/4 silt loam	Lot 12
	B1	50-75 cm	10YR 5/8 fine sandy loam	no
12	A1/Ap	0-25 cm	10YR 4/4 silt loam	Lot 13
	B1	25-48 cm	10YR 5/8 sandy loam	no
	C/B	48-65 cm	10YR 5/8 sandy loam with dense pebbles and gravel; bottoms on cobble layer	no
13	A1/Ap	0-25 cm	10YR 4/4 silt loam	no
	A2/E	25-45 cm	10YR 6/4 silt loam	no
	C/B	45 cm +	10YR 5/8 silt loam	
14	A1/Ap	0-25 cm	10YR 5/3 silt loam	(H)
	A2/E	35-45 cm	10YR 5/4 silt loam	no
	B1	45-55 cm	10YR 5/6 heavy silt loam	no

Beehive Property

STP	Horizon	Depths	Description	Artifacts
15	A1/Ap	0-25 cm	10YR 4/3 silt loam	(H)
	IC	25-50 cm	10YR 5/6 silt loam; gleyed	no
	IIAb	50-60 cm	10YR 4/4 silt loam; gleyed, iron and manganese staining	no
	IIB1	60-80 cm	10YR 5/8 silty clay loam	no
	IIB2	80-95 cm	10YR 5/8 very firm silty clay loam	no
16	A1/Ap	0-25 cm	10YR 4/3 silt loam	(H)
	IC	25-60 cm	10YR 5/6 silt loam; gleyed	no
	IIAb	60-73 cm	10YR 4/4 silt loam; gleyed, iron and manganese staining	Lot 14
	IIB1	73-85 cm	10YR 5/6 sandy clay loam	no
	IIB2	85-95 cm	10YR 5/8 sandy clay loam	no
17	A1/Ap	0-30 cm	10YR 4/4 silt loam	Lot 15
	IC	30-50 cm	10YR 5/6 silt loam	no
	IIA or	50-75 cm	10YR 4/4 silt loam; gleyed	no
	IIC		iron and manganese staining	
	IIIC	75-85 cm	10YR 5/6 sandy loam with pebbles and gravel	no
18	A1/Ap	0-29 cm	10YR 4/3 silt loam	Lot 16
	C/B	29-55 cm	10YR 5/6 sand loam with numerous pebbles and gravel	no
19	A1/Ap	0-18 cm	10YR 4/3 silt loam	Lot 17
	B2t	18-45 cm	10YR 5/8 silty clay loam	no
20	A1/Ap	0-20 cm	10YR 4/4 silt loam	(H)
	B2t	20-50 cm	10YR 6/8 silty clay loam	no
21	A1/Ap	0-30 cm	10YR 3/4 silt loam	no
	IC	30-45 cm	10YR 5/4 silt loam; gleyed, iron and manganese staining	no
	IIC	45-90 cm	10YR 5/6 silt loam; gleyed and mottled, iron and manganese staining	no
	IIIC	90-95 cm	10YR 3/3 silt loam; contains rotting wood	no
	IVC	95-117 cm	10YR 4/6 silt loam, gleyed	no

Beehive Property

STP	Horizon	Depths	Description	Artifacts
22	A1/Ap	0-25 cm	10YR 4/3 silt loam	(H)
	IC	25-60 cm	10YR 5/6 fine sandy loam	no
	IIC or			
	IIAb	60-80 cm	10YR 5/3 silt loam	Lot 18
	IIIC	80-115 cm	10YR 5/6 loamy sand; gleyed, iron and manganese staining	no
23	A1/Ap	0-30 cm	10YR 4/4 silt loam	Lot 19, (H)
	IC	30-55 cm	10YR 4/6 sand loam gleyed and mottled, iron and manganese staining	no
	IIAb	30-55 cm	10YR 3/3 silt loam; gleyed, iron and manganese staining	Lot 20
	IIC/B	70-120 cm	10YR 5/6 sand loam	no
24	A1/Ap	0-30 cm	10YR 4/4 silt loam	no
	IC	30-40 cm	10YR 4/6 sand loam; gleyed and mottled, iron and manganese staining	no
	IIAb	40-60 cm	10YR 3/3 silt loam; gleyed iron and manganese staining	no
	IIC	60-100 cm	10YR 5/6 sand loam	no
25	A1/Ap	0-30 cm	10YR 4/3 silt loam	Lot 21, (H)
	C/B	30-45 cm	10YR 5/8 sandy loam	no
26	A1/Ap	0-38 cm	10YR 3/4 silt loam	Lot 22
	B1	38-60 cm	10YR 5/8 silt loam	no
27	A1/Ap	0-32 cm	10YR 4/3 silt loam	Lot 23
	B1	32-58 cm	10YR 5/6 silt loam	no
	B2t	58-75 cm	10YR 6/8 silty clay loam	no
28	A1/Ap	0-26 cm	10YR 4/4 silt loam	no
	B1	26-40 cm	10YR 5/6 silty clay loam	no
	B2t	40-60 cm	10YR 4/6 silty clay loam	no
29	A1/Ap	0-26 cm	10YR 4/3 silt loam	(H)
	A2/E	26-37 cm	10YR 5/6 silt loam	no
	B1	37-50 cm	10YR 5/8 silty clay loam	no
	B2	50-75 cm	10YR 5/8 silty clay loam with pockets of 10YR 7/1 clay, and 10YR 6/8 mottling	no

Beehive Property

STP	Horizon	Depths	Description	Artifacts
30	A1/Ap B1	0-23 cm 23-50 cm	10YR 5/4 silt loam 10YR 6/8 silt loam	(H) no
31	A1/Ap A2/E B2	0-25 cm 25-40 cm 40-60 cm	10YR 4/4 silt loam 10YR 5/6 silt loam 10YR 5/8 silty clay loam	Lot 24 no no
32	A1/Ap B1 B2t	0-28 28-60 cm 60 cm +	10YR 4/4 silt loam 10YR 5/8 silty clay loam Predominantly 10YR 5/8 silty clay loam with pockets of 10YR 7/1 clay	Lot 25 no no
33	A1/Ap A2/E B1 C	0-24 cm 24-40 cm 40-55 cm 55 cm +	10YR 4/4 sandy loam 10YR 4/6 sandy loam 10YR 5/6-5/8 sandy clay loam 10YR 4/6 sandy loam with 10YR 6/2 mottling	Lot 26 Lot 27 no no
34	A1/Ap IIAp IIIAp IIIA2/E IIIB1 IIIB2	0-20 cm 20-30 cm 30-40 cm 40-45 cm 45-55 cm 55-75 cm	10YR 4/4 fine sandy loam 10YR 4/3 fine sandy loam 10YR 4/6 fine sandy loam 10YR 5/6 fine sandy loam 10YR 5/8 heavy sandy loam 10YR 5/8 very compact fine sandy loam with 10YR 6/3 mottling	Lot 28 Lot 28 Lot 29 Lot 29 Lot 30 Lot 30
35	A1/Ap A2/E B1 B2 B/C	0-29 cm 29-40 cm 40-55 cm 55-68 cm 68 cm +	10YR 4/4 fine sandy loam 10YR 5/6 fine sandy loam 10YR 5/8 heavy sandy loam 10YR 5/8 sandy clay loam very compact 10YR 5/8 sandy loam with 10YR 6/8 mottling	Lot 31 Lot 32 no no no
36	A1/Ap B1 C	0-30 cm 30-63 cm 63-80 cm	10YR 4/3 silt loam 10YR 5/8 silt loam 10YR 7/2 loamy sand with 10YR 5/8 mottling	Lot 33 Lot 34 no
37	A1/Ap A2 C/B C	0-28 cm 28-53 cm 53-78 cm 78 cm +	10YR 4/4 sandy loam 10YR 5/6 sandy loam 10YR 5/8 loamy sand 10YR 5/8 loamy sand with dense pebbles and cobbles	Lot 35 no no no

Beehive Property

STP	Horizon	Depths	Description	Artifacts
38	A1/Ap	0-25 cm	10YR 4/4 silt loam	no
	A2/E	25-50 cm	10YR 4/6 silt loam	no
	C	50 cm +	10YR 4/6 silt loam with dense pebbles and cobbles	no
39	A1/Ap	0-25 cm	10YR 4/4 sandy loam	Lot 36
	IC	25-37 cm	10YR 6/4 sandy loam with iron and manganese staining	no
	IIC	37-57 cm	10YR 5/6 and 10YR medium course sand, varved	no
	IIIC	57-69 cm	10YR 6/4 silt loam with 10YR 5/8 mottling	no
	IVAb	69-78 cm	10YR 5/3 sandy loam	no
	IVC/B	78-103 cm	10YR 5/6 loamy sand with dense pebbles and gravel	Lot 37
40	A1/Ap	0-30 cm	10YR 4/4 silt loam	no
	Apb	30-40 cm	10YR 4/4 silt loam; gleyed, iron and manganese staining	no
	IC	40-64 cm	10YR 5/4 silt loam; gleyed, iron and manganese staining	no
	IIAb or IIC	64-78 cm	10YR 3/3 silt loam; gleyed, iron and manganese staining	no
	IIIC	78-90 cm	10YR 4/6 silt loam	no
41	A1/Ap	0-24 cm	10YR 4/4 silt loam	no
	IC	24-70 cm	10YR 5/4 silt loam	no
	IIAb	70-78 cm	10YR 3/3 silt loam	no
	IIAC	78-90 cm	10YR 4/6 silt loam	no
42	IC	0-10 cm	10YR 4/6 silty clay	no
	Apb	10-37 cm	10YR 4/4 silt loam	Lot 38
	IIC	37-42 cm	7.5YR 4/4 loamy sand	no
	IIIC	42-48 cm	7.5YR 5/8 loamy sand	no
	IV C	48-58 cm	mixed 10YR 6/4 and 10YR 5/8 loamy sand	no
	VAb	58-87 cm	10YR 5/8 silt loam with iron and manganese staining	no
	VB/C	87-104 cm	10YR 5/8 sandy loam	no

Beehive Property

STP	Horizon	Depths	Description	Artifacts
43	A1/Ap	0-26 cm	10YR 4/4 silt loam	Lot 39
	A2/E	26-45 cm	10YR 4/8 sandy loam	Lot 40
	C	45-90 cm	10YR 6/4 fine-medium sand with dense pea gravel	no
	IIAb	90-100 cm	10YR 5/3 fine sandy loam with 10YR 4/6 mottling; gleyed	no
	IIC/B	100-109 cm	10YR 4/6 fine sandy loam	no
	IIC/B (auger core)	109-130 cm	10YR 4/6 fine to medium sandy loam, clay increasing with depth dense gravel and pebbles at 130 cm	no
44	A1/Ap	0-30 cm	10YR 4/4 silt loam	no
	C1	30-45 cm	predominantly 10YR 5/8 loamy sand with 10YR 6/4 sand lenses	no
	C2	45-80 cm	predominantly 10YR 5/8 loamy sand with 10YR 6/4 fine sand lenses and dense pea gravel	no
	IIAb	80-95 cm	10YR 5/3 fine sandy loam with 10YR 4/6 mottling gleyed	no
	IIC/B	95-110	10YR 4/6 medium-fine sandy loam	no
45	A1	0-15 cm	10YR 4/4 silt loam	no
	IC	15-22 cm	10YR 4/6 fine sandy loam	no
	Apb	22-46 cm	10YR 4/4 fine sandy loam	Lot 41
	IIC	46-55 cm	10YR 6/2 sandy loam with iron and manganese staining	no
	IIIAb	55-66	10YR 5/3 fine sandy loam with 10YR 4/6 mottling gleyed	no
	IIIC/B	66-100 cm	10YR 4/6 medium-fine sandy loam	Lot 42
	IIIC/B (auger core)	100-130 cm	10YR 4/6 medium-fine sand loam, gravel and pebbles increasing with depth; (Gravel Bar at 1.3)	

Beehive Property

STP	Horizon	Depths	Description	Artifacts
46	A1/Ap	0-30 cm	10YR 4/4 fine sand loam	Lot 43
	IC	30-90 cm	10YR 4/6 medium-fine sandy loam with 10YR 5/3 mottling	no
	IIAb	90-97 cm	10YR 3/2 fine sandy loam; gleyed, iron and manganese staining	no
	IIC/B	97-115 cm	10YR 4/6 fine-medium sandy loam	no
47	A1/Ap	0-30 cm	10YR 4/4 fine sandy loam	Lot 44
	IC	30-50 cm	10YR 4/6 medium-fine sandy loam with 10YR 5/3 mottling	
	IIAb	50-80 cm	10YR 3/2 fine sandy loam; gleyed, iron and manganese staining	Lot 45
	IIC/B	80-112 cm	10YR 4/6 fine-medium sandy loam	no
48	Ap	0-27 cm	10YR 4/4 fine sand loam	no
	IC	27-55 cm	10Yr 4/6 medium-fine sandy loam	no
	IIC	55-77 cm	10YR 4/6 medium-fine sandy loam	Lot 46
	IIIAb	77-85 cm	10YR 3/2 fine sandy loam; gleyed, iron and manganese staining	Lot 47
	IIIA/C	85-110 cm	10YR 4/4 sandy loam with 10YR 5/8 mottling	no
49	IC	0-15 cm	10YR 4/4 clay loam	no
	Apb	15-35 cm	10YR 4/4 fine sandy loam	Lot 48
	IIC	35-57 cm	heavily varved 10YR 4/6 medium-fine loamy sand with 10YR 5/8 mottling	no
	IIIAb	57-78 cm	10YR 3/2 sandy loam; gleyed, iron and manganese staining	Lot 49
	IIIC	78-100 cm	10YR 4/4 coarse loamy sand with 10YR 5/8 mottling	Lots 50, 51
	IVC	100-118 cm	7.5YR 5/8 loamy sand with numerous pebbles and gravel	Lots 52, 53
	VC	118-135 cm	10YR 5/8 loamy sand with dense pebbles and gravel Gravel Bar at 135 cm	Lots 54, 55

Beehive Property

STP	Horizon	Depths	Description	Artifacts
50	A1	0-10 cm	10YR 4/4 silt loam	(H)
	IC	10-18 cm	2.5YR 5/4 clay	(H)
	IIC	18-28 cm	10YR 3/4 fine sandy loam	(H)
	IIIC	28-50 cm	10YR 4/6 loamy sand	no
	IVC	50-90 cm	10YR 6/4 silt loam with iron and manganese staining	no
	VC	90-100 cm	10YR 5/8 loamy sand	no
	VIAb	100-120 cm	10YR 5/2 sandy loam	no
	VIC/B	120-130 cm	10YR 4/6 sandy loam	no
51	Ap	0-30 cm	10YR 4/4 silt loam	Lot 56
	C	30-95 cm	predominantly 10YR 5/4 silt loam; gleyed, iron and manganese staining	no
	C/B	95-115 cm	10YR 4/6 silt loam	no
52	A1/Ap	0-25 cm	10YR 4/4 fine sandy loam	Lot 57
	A2/E	25-35 cm	10YR 5/6 sandy loam	Lot 58
	B1	35-48 cm	10YR 5/8 sandy clay loam	no
	B/C	48-77	10YR 5/8 fine loamy sand with 10YR 6/3 mottling (very compact)	no
53	A1/Ap	0-33 cm	10YR 4/4 fine sandy loam	Lot 59
	A2/E	33-55 cm	10YR 5/6 sandy loam	Lot 60, 61
	C/B	55-70 cm	10YR 5/8 loamy sand	
	B/C	70+	10YR 5/8 sandy loam with 10YR 6/3 mottling	
54	A1/Ap	0-25 cm	10YR 4/4 fine sandy loam	Lot 62
	C/B	25-40	10YR 5/8 loamy sand with dense pebbles, gravel, cobbles	Lot 63
55	A1	0-5 cm	10YR 4/4 fine sandy loam	no
	Ap	5-15 cm	10YR 6/4 fine sandy loam	Lot 64
	B1	15-30	10YR 6/8 heavy sandy loam	no
56	A1	0-5 cm	10YR 4/4 fine sandy loam	no
	Ap	5-25 cm	10YR 6/4 fine sandy loam	no
	B1	25-40 cm	10YR 6/8 heavy sandy loam	no
57	A1/Ap	0-25 cm	10YR 6/4 fine sandy loam	Lot 65
	B1	25-34 cm	10YR 6/8 heavy sandy loam	no
58	AO/A1	0-15 cm	10YR 3/3 sandy loam	no
	B1	15-30 cm	10YR 5/6 sandy loam	no

Beehive Property

STP	Horizon	Depths	Description	Artifacts
59	A1	0-5 cm	10YR 3/3 sandy loam	no
	A2/E	5-20 cm	10YR 6/4 sandy loam	no

Beehive Property - Loudon Avenue Ruin

STP	Horizon	Depths	Description	Artifacts
60	A1/Ap B2t	0-20 cm 20-30 cm	10YR 3/3 silt loam 10YR 5/8 silty clay loam	Lot 1 no
61	Ap B1	0-12 cm 12-28 cm	10YR 4/3 silt loam 10YR 6/8 heavy silt loam with 10YR 5/8 mottling	Lot 2 no
62	Ap B2t	0-15 cm 15-35 cm	10YR 3/2 fine sandy loam 10YR 6/6 silty clay loam with 10YR 5/8 mottling	Lot 3 no
63	A1 A2/E B1 B2	0-13 cm 13-25 cm 25-35 cm 35-45 cm	10YR 3/3 sandy loam 10YR 6/4 sandy loam 10YR 6/8 sandy loam 10YR 6/8 sandy loam with 10YR 5/8 mottling	Lot 4 no no no
64	Ap B2t	0-15 cm 15-35 cm	10YR 3/2 fine sandy loam 10YR 6/6 silty clay loam with 10YR 5/8 mottling	no no
65	Fill Ap B1	0-17 cm 17-32 cm 32 cm +	mixed 10YR 3/3 and 10YR 6/6 sandy loam with 10YR 5/8 clay pockets 10YR 5/4 sandy loam 10YR 5/6 sandy clay loam	Lot 5 no no
66	A1/Ap A2/E B1	0-20 cm 20-28 cm 28+	10YR 3/3 sandy loam 10YR 4/3 sandy loam 10YR 6/4 clay loam with 10YR 5/8 mottling	Lot 6 no no
67	A1/Ap A2/E B1	0-15 cm 15-28 cm 28-38 cm	10YR 4/4 sandy loam 10YR 3/6 sandy loam 10YR 6/6 sandy clay loam with dense pebbles and gravel	Lot 7 no no

Appendix V Time and Cost Estimates for Phase II Evaluation of Site
18HO203 and Site 18HO206

Cost and Time Estimates for Phase II Evaluation of Site 18HO203

Phase II archeological investigations are recommended to assess the National Register eligibility of the prehistoric resources identified at Site 18HO203 if the site cannot be avoided. The suggested methodology involves background research and field investigations. Prior to archeological fieldwork, results of previous research including regional studies and predictive models will be examined and an explicit research design completed. The research design should list research questions that will guide the investigations. Goals of the Phase II evaluation will include, but are not limited to:

- 1) Boundary definition to allow a complete evaluation of site significance and to allow an evaluation of project effects. The field effort to identify boundaries should be concentrated within the area of potential effect.
- 2) Determining the presence and nature of archeological features.
- 3) Obtaining data on artifact distribution and activity areas. The field effort should be sufficient to refine the location and boundaries of artifact concentrations, particularly in areas where deep testing could not be accomplished during Phase I investigations, and address functional associations. The effort should be sufficient to provide data to guide the field effort if Phase III data recovery is appropriate.
- 4) Recovery of a sufficient number of chronologically diagnostic artifacts to date the site or its components, recovery of carbon samples, and recording of and interpretation of geomorphological data that may provide approximate chronological limits of the occupation(s) of the site.
- 5) Identification of stratified deposits to refine regional and local chronologies, culture histories, and cultural system interrelationships.
- 6) Investigation of site formation processes and evaluation of archeological deposits within a geomorphological context.
- 7) Evaluation of the site's potential to yield botanical and faunal information on environment, diet, and subsistence practices. The potential of the site to yield such information should be evaluated by the systematic collection and examination of soil samples.

Results of the Phase IB identification survey indicate that portions of Site 18H0203 contain buried archeological deposits with integrity. In some areas of the site, testing identified deposits located in excess of 1 meter below the present ground surface. Results of the Phase IB investigations also indicated that small shovel test pits (50 centimeters or less in diameter) severely limited the amount of information that could be obtained from the site due to the depths to which excavation was required, and the limitations on stratigraphic control that shovel test pits impose.

Excavations units measuring 1 meter by 1 meter are necessary to reach the depths at which the identified deposits are located, and to ensure that vertical boundaries of the deposits are obtained. Additionally, the degree of stratigraphic control necessary in the Phase II cannot be accomplished using other less intensive means. Use of heavy equipment to remove soil above the deposits is not feasible until sufficient data on the horizontal and vertical variability of the deposits is systematically obtained. Testing intervals greater than 15 meters will not provide adequate coverage to define boundaries and differentiate between chronologically or functionally discrete concentrations.

The suggested methodology for the Phase II field effort uses 1 meter by 1 meter excavation units in six transects aligned parallel to and 10 meters south of the Phase IB shovel test pit transects. Each transect will contain up to 11 units excavated at 15 meter intervals. The excavation units should cover an area within the area of effect where undisturbed deposits have been indicated by the results of the Phase IB investigation (Barse 1993, Figure 13). This area is contained within approximately 16,000 square meters and would require approximately 66 1 meter by 1 meter units at 15 meter intervals.

While the level of effort proposed for Phase II evaluation is intensive by traditional cultural resources management standards, the nature and complexity of this site dictates the methodological approach. A traditional cultural resources management approach would seek to avoid impacts to this site entirely. The proposed approach will ensure that enough data is obtained to adequately define the significance of the site, and provide a concrete basis to design a Phase III data recovery plan, if warranted, that is cost efficient and truly addresses recovery of information that is important. The approach will provide unambiguous data that ensures that any recommendation to proceed into Phase III data recovery is fully justified. Because Phase III data recovery is the most costly category of archeological research, it is not efficient to use this strategy to define what information should be recovered. The proposed Phase II methodology will also greatly minimize the chances of encountering unexpected finds that change the level of effort and thus the cost of Phase III data recovery.

The following time and cost estimate assumes that a work day is equivalent to 8 hours on site; that a 1 meter unit can be excavated and backfilled within 3 person days; that up to 5 archeological features may be identified and require partial or total excavation, and the feature excavations can be accomplished within 20 person days; that grid lay-out and site mapping can be accomplished within 6 person days; that the field personnel will consist of a Principal Investigator who will be on site at least 20% of the time during the field effort, one Field Supervisor, one Crew Chief, and 10 Field Technicians on site 100% of the time; that meals and lodging expenses are required, and paid only for actual work days, with double occupancy of motel accommodations; and no fencing will be required around the excavated areas during the field effort; that vehicle rental is not required.

Time: 12 calendar weeks

Background Research:

5 working days

Fieldwork:

24 working days

Laboratory Processing

10 working days

Analysis and Report Preparation

25 working days

A. Project Coordination

Project Manager @ \$190.00/day for 2 days \$ 380.00

Secretary @ \$65.00/day for 2 days 130.00

Total \$ 510.00

B. Background Research and Research Design

Principal Investigator @ \$145.00/day for 5 days \$ 725.00

Total \$ 725.00

C. Field Investigations

Principal Investigator @ \$145.00/day for 5 days \$ 725.00

Field Supervisor @ \$120.00/day for 24 days 2,880.00

Crew Chief @ \$72.00/day for 24 days 1,728.00

10 Field Technicians @ \$65.00/day for 24 days 15,600.00

Total \$ 20,933.00

D. Laboratory Processing/Curation Activities

Principal Investigator @ 145.00/day for 1 day \$ 145.00

Laboratory Supervisor @ \$105.00/day for 6 days 630.00

5 Laboratory Technicians @ \$65.00/day for 10 days 3,250.00

Total \$ 4,025.00

E. Analysis and Report Preparation	
Principal Investigator @ 145.00/day for 15 days	\$ 2,175.00
Field Supervisor @ \$120.00/day for 5 days	600.00
Artifact Analyst @ \$104.00/day for 5 days	520.00
Draftsperson @ \$65.00/day for 3 days	195.00
Editor/Production Manager @ 120.00/day for 1 day	<u>120.00</u>
Total	\$ 3,610.00
 Total Salaries	 \$ 29,803.00
 Overhead @ 120% of Total Salaries	 \$ 35,763.60
 Fee @ 10% of Total Salaries and Overhead	 6,556.66
Total of Salaries, Overhead, and Fee	\$ 72,123.26
 Direct Costs	
Lodging:	
6 rooms @ \$40.00 for 24 days	\$ 5,760.00
1 room @ \$40.00 for 5 days	200.00
Meals:	
12 people @ \$25.00/day for 24 days	7,200.00
1 person @ \$25.00/day for 5 days	125.00
Mileage:	
1,200 miles @ .26/mile	312.00
Special Analyses	
(faunal, floral, carbon, geomorphological)	2,000.00
Photographic supplies and processing:	
7 rolls of film @ 15.00/roll	105.00
Expendable field supplies	150.00
Reproduction	<u>200.00</u>
Total Direct Costs	\$ 16,052.00
 Total Project Cost	 \$ 88,175.26

COST AND TIME ESTIMATES FOR PHASE II EVALUATION OF SITE 18HO206

Phase II archeological investigations are recommended to assess the National Register eligibility of the prehistoric resources identified at Site 18HO206 if the site cannot be avoided. The suggested methodology involves background research and field investigations. Prior to archeological fieldwork, results of previous research including regional studies and predictive models will be examined and an explicit research design completed. The research design should list research questions that will guide the investigations. Goals of the Phase II evaluation will include, but are not limited to:

- 1) Boundary definition to allow a complete evaluation of site significance and to allow an evaluation of project effects.
- 2) Determining the presence and nature of archeological features.
- 3) Obtaining data on artifact distribution and activity areas. The field effort should be sufficient to refine the location and boundaries of artifact concentrations, particularly in areas where deep testing could not be accomplished during Phase I investigations, and address functional associations. The effort should be sufficient to provide data to guide the field effort if Phase III data recovery is appropriate.
- 4) Recovery of a sufficient number of chronologically diagnostic artifacts to date the site or its components, recovery of carbon samples, and recording of and interpretation of geomorphological data that may provide approximate chronological limits of the occupation(s) of the site.
- 5) Identification of stratified deposits to refine regional and local chronologies, culture histories, and cultural system interrelationships.
- 6) Investigation of site formation processes and evaluation of archeological deposits within a geomorphological context.
- 7) Evaluation of the site's potential to yield botanical and faunal information on environment, diet, and subsistence practices. The potential of the site to yield such information should be evaluated by the systematic collection and examination of soil samples.

Results of the Phase IB identification survey indicate that portions of Site 18H0206 contain buried archeological deposits with integrity. In some areas of the site, testing identified deposits located in excess of 1 meter below the present ground surface. Results of the Phase IB investigations also indicated that small shovel test pits (50 cm or less in diameter) severely limited the amount of information that could be obtained from the site due to the depths to which excavation was required, and the limitations on stratigraphic control that shovel test pits impose.

Excavations units measuring 1 meter by 1 meter are necessary to reach the depths at which the identified deposits are located on the floodplain adjacent to a tributary of Shallow Run, and to ensure that vertical boundaries of the deposits are obtained. Additionally, the degree of stratigraphic control necessary in the Phase II cannot be accomplished using other less intensive means. Use of heavy equipment to remove soil above the deposits is not feasible until sufficient data on the horizontal and vertical variability of the deposits is systematically obtained. Testing intervals greater than 15 meters will not provide adequate coverage to define boundaries and differentiate between chronologically or functionally discrete concentrations.

The suggested methodology for the Phase II field effort uses 1 meter by 1 meter excavation units in five transects aligned parallel to, and 10 meters east and west, of the Phase IB shovel test pit transects on the floodplain of the unnamed tributary of Shallow Run. The transects should be located within an "L" shaped area measuring approximately 6,000 square meters where undisturbed deposits in the A2/E, Ab. and C horizons were indicated by the results of the Phase IB investigation (Barse 1993, Figures 8 - 10). A total of 35 1 meter by 1 meter units is required. Five additional 1 meter by 1 meter units should be excavated on the elevated terrace with their locations determined by the project's principal investigator, based upon the results of the previous Phase IB survey.

While the level of effort proposed for Phase II evaluation is intensive by traditional cultural resources management standards, the nature and complexity of this site dictates the methodological approach. A traditional cultural resources management approach would seek to avoid impacts to this site entirely. The proposed approach will ensure that enough data is obtained to adequately define the significance of the site, and provide a concrete basis to design a Phase III data recovery plan, if warranted, that is cost efficient and truly addresses recovery of information that is important. The approach will provide unambiguous data that ensures that any recommendation to proceed into Phase III data recovery is fully justified. Because Phase III data recovery is the most costly category of archeological research, it is not efficient to use this strategy to define what information should be recovered. The proposed Phase II methodology will also greatly minimize the

chances of encountering unexpected finds that change the level of effort and thus the cost of Phase III data recovery.

The following time and cost estimate assumes that a work day is equivalent to 8 hours on site; that a 1 meter unit can be excavated and backfilled within 3 person days; that up to 5 archeological features may be identified and require partial or total excavation, and the feature excavations can be accomplished within 20 person days; that the field personnel will consist of a Principal Investigator who will be on site at least 20% of the time during the field effort, one Field Supervisor, one Crew Chief, and 10 Field Technicians on site 100% of the time; that meals and lodging expenses are required, and paid only for actual work days, with double occupancy of motel accommodations; that vehicle rental is not required.

Time: 10 calendar weeks

Background Research:	5 working days
Fieldwork:	14 working days
Laboratory Processing	10 working days
Analysis and Report Preparation	25 working days

A. Project Coordination

Project Manager @ \$190.00/day for 2 days	\$ 380.00
Secretary @ \$65.00/day for 2 days	<u>130.00</u>
Total	\$ 510.00

B. Background Research and Research Design

Principal Investigator @ \$145.00/day for 5 days	\$ 725.00
Total	\$ 725.00

C. Field Investigations

Principal Investigator @ \$145.00/day for 3 days	\$ 435.00
Field Supervisor @ \$120.00/day for 14 days	1,680.00
Crew Chief @ \$72.00/day for 14 days	1,008.00
10 Field Technicians @\$65.00/day for 14 days	<u>9,100.00</u>
Total	\$12,223.00

D. Laboratory Processing/Curation Activities

Principal Investigator @ 145.00/day for 1 day	\$ 145.00
Laboratory Supervisor @ \$105.00/day for 6 days	630.00
5 Laboratory Technicians @ \$65.00/day for 10 days	<u>3,250.00</u>
Total	\$ 4,025.00

E. Analysis and Report Preparation	
Principal Investigator @ 145.00/day for 15 days	\$ 2,175.00
Field Supervisor @ \$120.00/day for 5 days	600.00
Artifact Analyst @ \$104.00/day for 5 days	520.00
Draftsperson @ \$65.00/day for 3 days	195.00
Editor/Production Manager @ 120.00/day for 1 day	<u>120.00</u>
Total	\$ 3,610.00
 Total Salaries	 \$21,093.00
 Overhead @ 120% of Total Salaries	 \$25,311.60
 Fee @ 10% of Total Salaries and Overhead	 \$ 4,640.46
 Total of Salaries, Overhead, and Fee	 \$51,045.06
 Direct Costs	
Lodging:	
6 rooms @ \$40.00 for 14 days	\$ 3,360.00
1 room @ \$40.00 for 3 days	120.00
Meals:	
12 people @ \$25.00/day for 14 days	4,200.00
1 person @ \$25.00/day for 3 days	75.00
Mileage:	
720 miles @ .26/mile	188.00
Special Analyses	
(faunal, floral, carbon, geomorphological)	2,000.00
Photographic supplies and processing:	
5 rolls of film @ 15.00/roll	75.00
Expendable field supplies	150.00
Reproduction	<u>200.00</u>
Total Direct Costs	\$10,368.00
 Total Project Cost	 \$61,413.06